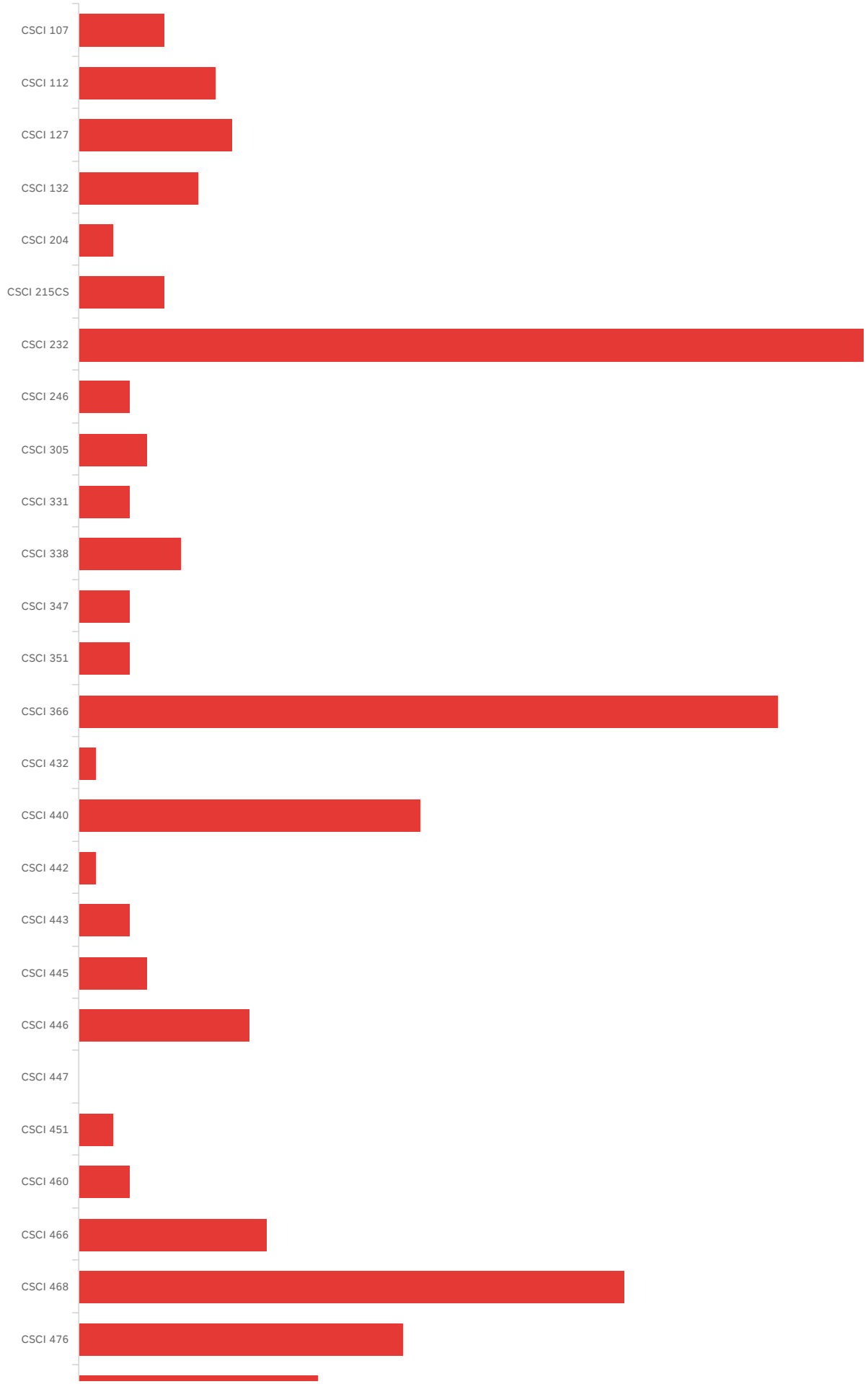
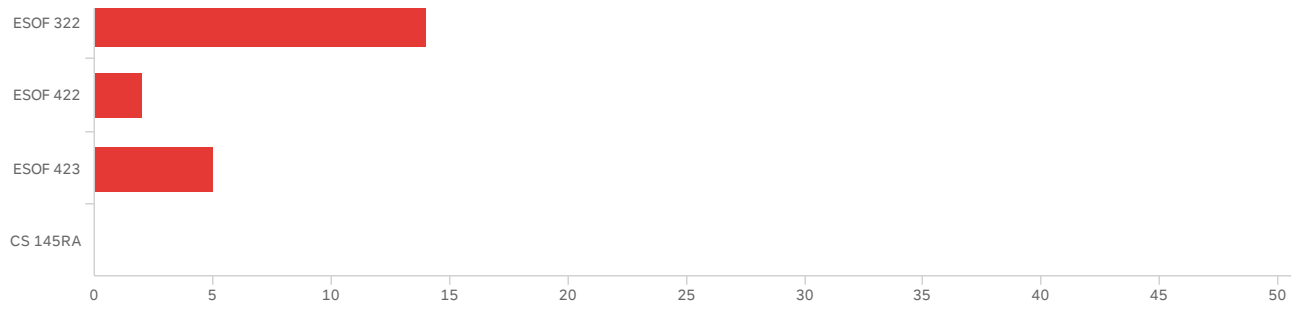
Default Report

AY24 CS-P Senior Survey

April 15, 2024 11:18 AM MDT

Question 1 - Q1) Choose up to 3 courses in the curriculum that you found most valuable


CSCI 107
CSCI 112
CSCI 127
CSCI 132
CSCI 204
CSCI 215CS
CSCI 232
CSCI 246
CSCI 305
CSCI 331
CSCI 338
CSCI 347
CSCI 351
CSCI 366
CSCI 432
CSCI 440
CSCI 442
CSCI 443
CSCI 445
CSCI 446
CSCI 447
CSCI 451
CSCI 460
CSCI 466
CSCI 468
CSCI 476



#	Field	Choice Count	
1	CSCI 107	1.84%	5
2	CSCI 112	2.94%	8
3	CSCI 127	3.31%	9
4	CSCI 132	2.57%	7
5	CSCI 204	0.74%	2
6	CSCI 215CS	1.84%	5
7	CSCI 232	16.91%	46
8	CSCI 246	1.10%	3
9	CSCI 305	1.47%	4
10	CSCI 331	1.10%	3
11	CSCI 338	2.21%	6
12	CSCI 347	1.10%	3
13	CSCI 351	1.10%	3
14	CSCI 366	15.07%	41
15	CSCI 432	0.37%	1
16	CSCI 440	7.35%	20
17	CSCI 442	0.37%	1
18	CSCI 443	1.10%	3
19	CSCI 445	1.47%	4
20	CSCI 446	3.68%	10
21	CSCI 447	0.00%	0
22	CSCI 451	0.74%	2
23	CSCI 460	1.10%	3

#	Field		Choice Count
24	CSCI 466	4.04%	11
25	CSCI 468	11.76%	32
26	CSCI 476	6.99%	19
27	ESOF 322	5.15%	14
28	ESOF 422	0.74%	2
29	ESOF 423	1.84%	5
30	CS 145RA	0.00%	0
			272

Showing rows 1 - 31 of 31

Question 1-explain - Q1-EX) Please explain your answer to the valuable courses question

Q1-EX) Please explain your answer to the valuable courses question
I felt like I learnt the most in these classes.
i have personally found that the concepts learned in 232 has easily been the most valuable to me. some concepts from this class has come up, or has been useful in just about every subsequent class that I've taken. 338 and 246 felt like an extension of this. pretty much every coding interview question that I've been asked or have practiced has been about something I've learned in these classes.
132 was a strong introduction into the concepts of data structures, 215CS had a meaningful look into ethics of computer science which I personally value, 476 was computer security which I personally believe to be extremely important today.
nice useful classes
very helpful classes
CSCI 366: Got a better idea of the foundations of computing and got a better idea of how memory works. CSCI 440: Learned how to make a decent database design, and learned about the practical considerations when using databases in industry. CSCI 446: Learned a lot of useful and advanced algorithms in AI. Wrote a lot of code. Challenging but worth it.
Great foundations with experience in coding and learning practically in CS. The capstone course was well done in incorporating everything.
Provides necessary skills needed to go into the workforce.
they offered alot of the backbone that formed my understanding of computer science
CSCI 232 covered a lot of foundational concepts and was more of a start to writing harder programs. It's scored above 132 because I didn't learn as well with Hunter Lloyd's teaching style. I also knew some programming coming into college, so the early Python courses were not as valuable. CSCI 440 was taught by Carson Gross. He's a really good teacher, and the good overview of databases and how to write SQL is very handy and useful in industry. CSCI 476 was taught by Reese Pearsall. I like his teaching style, and I have already seen the concepts and activities we've done in this class being helpful when being asked interview questions and asking what I should expect to be doing at different jobs.
Gross and Yaw made these classes fantastic. They were both informative and enjoyable. Lastly Shepard's AI class was both the hardest and most interesting that I've taken.
These courses felt like they covered the most information for CS majors that is crucial to success in the industry.
I think the most important thing a CS student can learn is how to structure data, how to be ethical with that data, and how to protect that data.
These courses gave me a deeper understanding of computer science
CSCI 232 (Data Structures and Algorithms) and CSCI 446 (Artificial Intelligence) were the two classes that I found that pushed me the most to learn and improve. CSCI 466 (Networks) turned out to be a class that I used knowledge from more often than I would've initially expected.
These three classes handle the fundamentals of coding and provide the building blocks to succeed in most other classes.
The classes that give you a solid foundation in Software Engineering stuck with me and I found the most value.

Q1-EX) Please explain your answer to the valuable courses question

CSCI 366 is the class where I felt like things really started to click for me as far as writing and understanding code goes. I didn't feel constantly lost and really started to gain confidence as a developer. CSCI 440 was a great introduction to databases and how they connect to applications CSCI 468 was important for understanding how programming languages and compilers really work.

I feel that the curriculum provided in these classes was the most effective in strengthening my programming skills, as well as in aiding in my understanding of more abstract computing concepts. I found that I was the most engaged in my coursework when taking these classes.

232 I think is the most valuable CS course overall because It builds a foundation for classes that follow. I have taken coding interviews for jobs and Data structures/ algorithms are the foundation for all of those kinds of questions. 366 was also valuable because it was built upon in later classes. I think that having an idea of the hardware side of computers is very important for computer scientists. ESOF 322 was important because it contains content that is useful for any job - how software is composed and the development cycle

I just felt like those were the most valuable for me. 232 was where I started feeling like the stuff I was learning was "ramping up" so to speak, and it started feeling more real, like I could use what I was learning in the real world instead of the easier assignments we were given in the earlier classes (which were still very helpful!). 366 taught me a lot about how computers themselves work, how numbers / values / etc are sent around the various registers, etc. I didn't know much about that process beforehand so that was really valuable to me. I'd say ESOF 322 might be the course that was most valuable to me just because it felt the most real. At that point I hadn't had any internship or work experience, so it was really interesting to learn about the different work / development processes. It felt like I could apply a lot that we learned to the workplace.

232 is by far the most important class in the degree, and should be emphasized as such as much as possible. The department's best teachers should be assigned to it, and it should not be easy. Other option not listed is Devin Gray's Industry Methods class, which should be a required class.

232 was great because it introduced me to many of the very important data structures that are used daily in the industry. 366 was important to me because it gave me a more holistic approach to computer science, with a bottom up approach to how the entire system works in unison. 446 was probably the hardest class I have taken in my entire life. It was nice because it forced you to not only understand the concepts being taught, but also how they are applied. I would never take that class again thanks to it being so time consuming, but it was an important experience in my opinion.

Well taught courses that went deeper on important CS topics, while also helping provide more advanced CS knowledge that was broadly applicable.

Good classes for developing fundamental skills as a programmer.

232 was the class I became comfortable with coding in Java, I felt like I finally knew what I was doing. The data structures are important as well 366 bridged the gap of abstraction between galvanized rocks to languages like python. 423 is the closest class to a real world experience, which I find it extremely valuable

232 gave the best foundation for programming 338 was intersting and gave me a different way to view processes, 440 was the most valuable project

I found 127 important because being able to use python is important for students going into data science. I found 232 important because students use a lot of Java in their careers here at MSU. finally, I picked 366 as an important class, was because you use the skills from 232 to help complete this course.

I found 112 (Programming with C) to be very valuable because the C language is very bare-bones compared to most others. This gave me a much better understanding of how other, more abstracted languages worked. For example, I left this class with a significantly better understanding of pass by reference vs pass by value. I found 232 (Data structures and Algorithms) to be valuable because it taught me to the tools and tricks to handle more complex problems in efficient ways. Without a good understanding of the most common data structures and algorithms and how to use them students will enter the workforce and be very confused by the code they are reading and how to work with it. I found 338 (Computer Science Theory) to be valuable because it provided me with a high-level understanding of the limits of computation and how those limits could potentially be pushed further. It got me excited for the future of computation and helped me put my own code and algorithms into perspective.

232 is a given because it's the building block for many other topics. Networks(466) cover a lot of really important topics and Reese is a great professor for it. Finally, Compilers was very valuable and I enjoyed Carson's approach to teaching the class.

The main reason that I picked these three courses was because Carson sets his courses up as if he was a project manager and we are his employees. He develops code bases and sets tasks for us to implement functionality within the given code bases, much like how working in a real world environment would be.

Q1-EX) Please explain your answer to the valuable courses question

Data structures and Algorithms is when I felt I really got a grasp on programming and how these different algorithms are used in real work systems. Databases is very valuable since that is a common requirement for many software engineering jobs. 366 was very valuable since it was my first exposure to working heavily with git and unit tests while improving my coding skills.

Both 338 and 468 give the opportunity to really dive in to programming and coding principles. The projects in both of those courses require a deeper understanding of the course material. CSCI215 is very important to all people in the CS industry. There are many dangers and downfalls that can be avoided just by simply being aware of them and this unintential bias one may not see they hold.

I already had knowledge of basic coding principles, if I didn't either 132 or 232 would certainly have mad my list. 476 should in my opinion be required learning. The knowledge about how to protect your code from cyberattacks and build code that can be used in a professional space was invaluable. 351 gave me a strong foundation for Linux and helped introduce me to more of the back end system level information that doesn't use a custom dev environment. Super helpful stuff. Finally, 215CS was very important as it made me aware of common pitfalls, flaws and ethical problems I would need to account for in my CS journey. I also believe every student needs that class.

CSCI 232 is the basics that are needed for every other class. If it is taught well, then students can easily find success in their other courses. Carson does an excellent job teaching CSCI 366, and Reese is the same way with CSCI 466. These are easily the two best professors in the CS department.

I found CSCI 215 to be valuable because it walked me through how to develop an ethical mindset, which is critical for building public trust for the technology industry. CSCI 232 was also valuable because it taught me how to understand certain data structures and algorithms that are foundational to many useful algorithms. CSCI 366 explored how computers work physically, and how they understand and process instructions, which helps me understand computing on a more fundamental level.

CSCI 460 - Operating Systems was valuable to me because it addressed multi-threading in detail and concerns regarding the concerns such as deadlocks, semaphores, process scheduling protocols (round-robin, Lowest Priority First, etc.) and focused on these topics rather than lightly discussing them. I believe this is a very useful class for people regardless of further education like graduate school. CSCI 466 - Networks was valuable to me since I am rather interested in Cyber Security and wanted to know more about the networking protocols, the course provided insight into sockets programming, network encryption, and general flow of packets. Although I will rarely use the programming from the class it was good to understand how these applications work in general. CSCI 476 - Computer Security was really valuable to me since it was an introduction to various vulnerabilities such as SetUID, cross site scripting, buffer overflow, and a few others, and looked at the mitigations against them like ASLR, and others. As someone who is interested in pursuing career in cybersecurity and vulnerability detection, I found this class to be a really good introduction, I would like to see more like it.

CSCI 232 gave me important information on common data structures and algorithms and how you might incorporate them into a program. CSCI 366 gave background information on computers, how they work, assembly, and how higher level programming languages work. ESOF 322 taught me the software engineering process and gave me an opportunity to use this knowledge in a group project.

Carson Gross has been giving us insight into what a professional project would look like at a job while structuring everything to best teach those concepts. Things like professional practices of variable names and structure of OOP and functional programming. He also touches on how people sometimes are absolutists or purists when it comes to languages and concepts but they are all tools and the more you know and the better you understand them the better off you'll be. I did enjoy 331 because it offered a lot of insight of what a front-end dev does an it opened a possible avenue I wanted to explore and maybe work in going forward

I don't know if it's just Carson's teaching methods, but 366 was the first time I actually felt like I could code. It was the first class since 107 I felt like I was actually learning coding methods vs just writing bad code to complete a Lab or assignment without really knowing what the code was actually doing.

I found CSCI 232 to be one of my most valuable classes because it provides the needed foundation to understand the data structures and algorithms that underlie so much of CS. I feel that ESOF 322 was valuable because when I was interning after taking this course, I was constantly applying the concepts and practices that were taught in it, more than almost any other class. I think that CSCI 366 was valuable because my understanding of the broader picture of computing was limited before this class. I was unfamiliar with how transistors, CPUs, and machine code worked, and going up the levels of abstraction was helpful.

I chose the courses Compilers, Software Engineering, and Computer Systems because they all contributed to understanding the implementation and process of programming languages. From the electronics on the boards and systems to the design structure of software, the above classes give details into how computer science works beyond the normal level of learning.

Q1-EX) Please explain your answer to the valuable courses question

I feel the way that Carson taught 366 and 440 made me actually learn the material and for 366 I learned a lot more about how a computer actually works on the inside. 440 helped me learn more about databases and since a lot of companies have positions that require working with databases, it makes me more appealing for the job compared to others that did not take the class. I feel that 466 was valuable similar to 366, as I did not know much about how networks work.

These courses best helped me get an in-depth understanding of computer science and programming. I also believe these classes were so valuable to me in large part of the instructors I had, Dr. May Ann Cummings, Dr. Sean Yaw, and Carson Gross.

I found 366 valuable because of the realistic assignments and overall structure of the class. I found CSCI 445 valuable because humans and computers will eventually be together and having basic knowledge is very helpful. I found 476 valuable because basic security online is something everyone should know.

In projects an internships I have had to use databases with everything so 440 is very helpful and should be required. 322 is super helpful for learning how to understand how systems you might not know work. 232 is good for giving a good foundation for coding.

For CSCI 232 I believe this class is extremely important due to the fact it lays some crucial groundwork that you will use in all of your other classes and future endeavors. For CSCI 446, I chose this class because it was extremely challenging and I learned more within the confines of this class than any other class I have taken. It is very pertinent in today's world as well. ESOF 423 was very important because it allowed for me to work in an environment and gain experience that I can use in the workplace in my future career.

I chose these three courses as more valuable to me due to the fact they are more geared towards what I want to do in future employment. I plan to be in cyber security; thus, CSCI 476 and CSCI 440 give me a good foundation, and CSCI 366 helps with fundamentals.

CSCI 347 - The industry is trending to heavily towards Data Mining usage in AI/LLM. Thus, this class felt important to entering the professional field. CSCI 440 - Most job listings require some form of Database experience. In my opinion, this should probably be a required class. It feels a little off that we can graduate with a computer science degree without ever touching databases when everything has been on the cloud for quite some time now. I wish it covered AWS/Azure a little though. ESOF 423 - This class felt the closest to being actually employed. Working in a small team in two week sprints with the end goal of completing a deliverable to a client is a fantastic resume builder and provides opportunities to get references as well.

They give the closest type of curriculum that can be applied to industry.

The above have use cases outside of schooling for the most part. A lot of the others are more specific to what you want to do.

My instructors for these courses did a great job teaching the content in an easy to absorb way, made lectures available online which is a huge convenience, always gave great help when asked, and made it clear how each skill we learned could be useful in a real world scenario.

The basics of data structures and algorithms come up again and again in interviews throughout my learning of CS.

These classes helped me build confidence in my coding skills

The reason I chose CSCI 112 was because it introduced me to the language C and null pointers and had me deal with memory issues and keeping track of pointers, which I think is really valuable. CSCI 232 introduced me to big O notation which I never really understood. Which is crucial to understand if you want to have a BS in Computer Science. CSCI 246 was valuable to me because it taught me think about logical proofs which challenged my thinking.

CSCI 232: This course taught was where I really was challenged to become an independent programmer. I took it with Dr. Yaw and have since been confident in my coding skills and simple Big-O analysis. CSCI 305: This course made me think about programming languages in a more technical way. I took it with Dr. Revelle who also taught about functional programming using Haskell and had us create an interpreter which was very challenging. This class seems like it will compliment CSCI 468 very well. CSCI 366: This course taught me how our computers actually do what they do and explained how functions are not really a concrete concept -- just calling conventions and memory management. It demystified the magic of computers for me and replaced it with understanding and a little marvel.

The most valuable courses are those that will lead me towards a job and those that were taught with excellent professors.

Q1-EX) Please explain your answer to the valuable courses question

CSCI 107 (Joy and Beauty of Computing): In my freshman year at Montana State University, I was undeclared. I took Web Design with Professor Daniel DeFrance in the Fall semester of my freshman year. Towards the end of the course, he advised me to take CSCI 107 since I hadn't had any prior programming experience. I ended up taking the class in the Spring 2021 semester with Dr. John Paxton teaching. Having the director of the computer science department teaching the class made all the difference. I learned a ton, and the class served as my baseline of computer science and programming knowledge moving forward. The strong base that this class provided me makes it very valuable to me personally. The course also convinced me to declare as a computer science major. CSCI 366 (Computer Systems): This class singlehandedly reinvigorated my interest in computer science. Up to the point of taking this class, much of what I had learned felt so abstract. I felt lost in all of the layers of complexity involved in computer science. Learning about computer systems from the bottom up helped clear up so much of the confusion I had felt up to that point. I honestly believe that this class should be taught way earlier in the curriculum; I believe it is that important. CSCI 466 (Networks): Over the Summer of 2023, my academic interests shifted towards cybersecurity. The Networks class helped give me a lot of necessary knowledge to become more comfortable in that area. Additionally, I just thought this class was super interesting. Learning about the infrastructure of how computers communicate with one another is fascinatingly complex.

CSCI 331 was one of the most valuable courses I have taken because it taught me practical web development skills that will be helpful in my career. CSCI 331 taught me valuable skills that the industry values. For example, we learned how to develop websites with front-end and back-end technologies like React and MySQL. We also learned how to collaborate with a partner using Git. CSCI 366 was one of the most valuable courses because the professor put a lot of effort into the class to help me learn. The course also had excellent grading, which gave me good feedback on how well I understood the concepts. The grading was good in this course because it was mostly automated and gave me instant feedback on whether my software was working. The course also taught me how to use industry technologies like Git. CSCI 446 was my final most valuable course because it was one of the most challenging. I have taken it taught me how to program with other team members. This course taught me more about using git to collaborate with team members than any other course. CSCI 446 also forced us to use skills from previous classes. For example, discrete, algorithms, and software engineering.

My goals have always been to explore the field of game design, so the above classes all contributed to my interests the most and I remember my teachings there more than in other classes.

I chose the classes that I enjoyed and felt like I got the most out of. 232 provided basic concepts of programming languages, 440 inspired my interest in UI design, and in 476 I felt like I really gained a lot of understanding in various computer security concepts.

CSCI 331 was one of the most valuable courses I have taken because it thought me practical web development skills that are will be helpful in a for my career. CSCI 366 was one of the most valuable courses because I could tell the professor put a lot of effort into the class to help me learn. CSCI 446 was my final most valuable course because it was one of the most challenging courses, I have taken, and it taught me how to program with other team members.

I believe that they are some of the most key concepts in industry as well as just the fundamentals of applying theory to the real world to create software systems. If there was one other classes that I would choose I would say 232 Data Structures and algorithms and Computer Security as Computer Security of the most applicable fields and teaching common attack vectors and how to prevent them helps increase the capabilities of students to make things using best practice. As for 232 I think it is the foundation that I take for granted as while it initially is hard to see the direct application of the class content every other class above 232 uses the skills taught in 232. The quality of teaching in courses listed is also extremely high and made it so that the key lessons were easier to digest and understand the significance of the concepts. I especially enjoyed my classes with Carson as I believe most classes would benefit from a structure of multiple mini-projects throughout the semester that build into semester long projects (applies to basically every class except classes like 132, 305, 338, 246). This would help show some of the tooling used to manage larger code bases and emulate projects where the majority of the mastery is in understanding other peoples code and structuring your code around theirs while building new functionality into applications.

CSCI 204 was extremely valuable to me because it taught me how to use the C# language to develop for the Unity game engine, which is used for many projects in computer science, game development, and many other fields. I regularly use what I learned from 204 to tinker around in Unity in my spare time, which has helped me learn even more outside of class. CSCI 440 taught me about how to manage databases in SQL, and it was the first class I took at MSU that exposed me to git and Github, which has proven extremely useful to me. CSCI 468 gave me a good idea of what a real-world job assignment might be like with writing a compiler with test-driven development.

It is relevant to real life and it can be implied in work. It is also mostly used in many industry/company and good knowledge to have.

366 teaches about imbedded systems 468 teaches you how to code in industry 446 teaches you how to think algorithmically

232 is good because it teaches you algorithms, compilers is really good introduction to how compilers work, 305 is a good intro to different programming languages

Q1-EX) Please explain your answer to the valuable courses question

All of these seem to have core concepts that would be invaluable for coding.

easy

I specifically enjoyed taking classes taught by Carson Gross. He is an excellent at conveying concepts in a logical and approachable manner. He also provides context to the ideas he talks about, that only someone with lots of experience could shed light on. I particularly enjoyed compilers, systems, and networks. These courses were most interesting to me.

322- Learning about the agile method and scrum are very valuable in industry. 476 - computer security is an incredible valuable tool going forward in tech 468 - this was one class where I was challenged to solve real problems not just something that was a problem given in lecture

Those 3 courses I listed above were the most valueable in terms of hands on experience and knowledge base for a real world application.

CSCI 476 - Fun to learn about practical and realistic cyber attacks that can happen and how to defend against them. CSCI 232 - Really helped to improve my coding ability. CSCI 112 - Helped to expand my knowledge on different programming languages.

These courses underpinned the majority of the remainder of my CS program experience. Being comfortable thinking about algorithms and data structures efficiently and effectively (432), and being comfortable with "language" in a CS context (305 and 468) informed my development and learning in nearly every other CS field significantly more than any other knowledge and experience.

CSCI 232 taught valuable skills that apply to almost every programming project you can be working on. CSCI 366 and 468 were exceptional because of the projects that Carson has you do. You get the most hands on learning from his courses, making it easy to learn the core concepts he's teaching.

CSCI 232 - I had Dr. Cummings and she did a great job to teach me all the basic data structures and algorithms. I think basic data structures and algorithms are super important to the rest of my CS journey. This class was so important because CSCI 127 and CSCI 132 did not do a good job teaching the basic data structures and algorithms to a beginner like myself. CSCI 366 - Professor Gross made a very complicated class easier to understand and I learn a lot about computers that I didn't know before. It was also the first class that I had a really big coding project that was most of the semester and Professor Gross helped me to understand how to tackle big projects that seem daunting, which is a valuable skill to have. CSCI 468 - Making a compiler was very hard and confusing but I learned so much about different languages and how to set up large projects.

232 helped me tie together concepts in 112 and 132, essentially a foundation for coding. 468 was great practice using it all together. In my internship, I felt incredibly prepared (especially compared to other interns I met) because of my understanding of concepts learned in 322. As we all know, Professor Cummings worked in industry for years; her dedication to stressing what is legitimately used in the "real world" - and practicing it - in 322 made it an incredibly valuable course.

CSCI 127: This is the class that taught me how to code. Python was a great introduction. This class was not hard but also taught me to struggle and problem solve. CSCI 232: This class taught me about data structures and algorithms which are the foundation of basically any technical coding interview. Really trying in this class sets you up to do well on technical interviews. This class was a good level of challenging and felt like the first time I took my programming to the next level CSCI 468: Carson Gross is the best teacher in the computer science department and the best teacher I had at MSU. He could teach anything and I would take it. This course specifically was cool because we were learning about the code that makes code actually work, which seemed very daunting but was very cool. The way he sets up projects are great. Lectures prepare you well for actually doing assignments.

Understanding these three classes I feel sets me up more for the current field I am interested in working in.

I ended up taking CSCI 366 later than I should have and I wish I didn't because it really colored in the dots with a lot of other classes CSCI 232 taught me good OOP structures

I chose these three courses as the most valuable due to what I was able to use in other areas of Computer Science. Data structures and Algorithms seems to come up in every class, Compilers was an amazing class that brings together programming down to the hardware that runs it and to Computer Systems, and Computer Security was an amazing overview of security in general, which I am going to pursue. I could add a lot more to this list as each one taught me something else that helped make me a more well rounded individual in regards to becoming a computer scientist.

Q1-EX) Please explain your answer to the valuable courses question

CSCI-232 was selected because I feel that it provided the best intermediate knowledge of all my classes, preparing me for further specialization down the road. CSCI-366 was selected because I feel that it is important to have a good working knowledge of computers from the ground up which this class helped with greatly. ESOF-322 was selected because it helped provide a better understanding for the core of design and how to visualize and layout larger programs/software products.

These classes taught skills/topics beyond programming that I have found immensely useful now that I work in the software engineering field.

232: Provides critical knowledge to improve programming ability. 366: Gives further background on how a computer works behind the scenes which gives more well-rounded knowledge about computing other than just programming. 322: Necessary for learning about agile, scrum, and git. Gives a taste of working in CS in the real world.

232: Gives a helpful, challenging introduction to the harder concepts in programming and provides a good distinction between data structures and algorithms. I think this course quickly improves student's programming skills. 366: Provides a good overview of how a computer works not just from the coding level which I think is an important understanding to have. 322: Introduces students to what real-world work in CS will be like with agile and scrum based models.

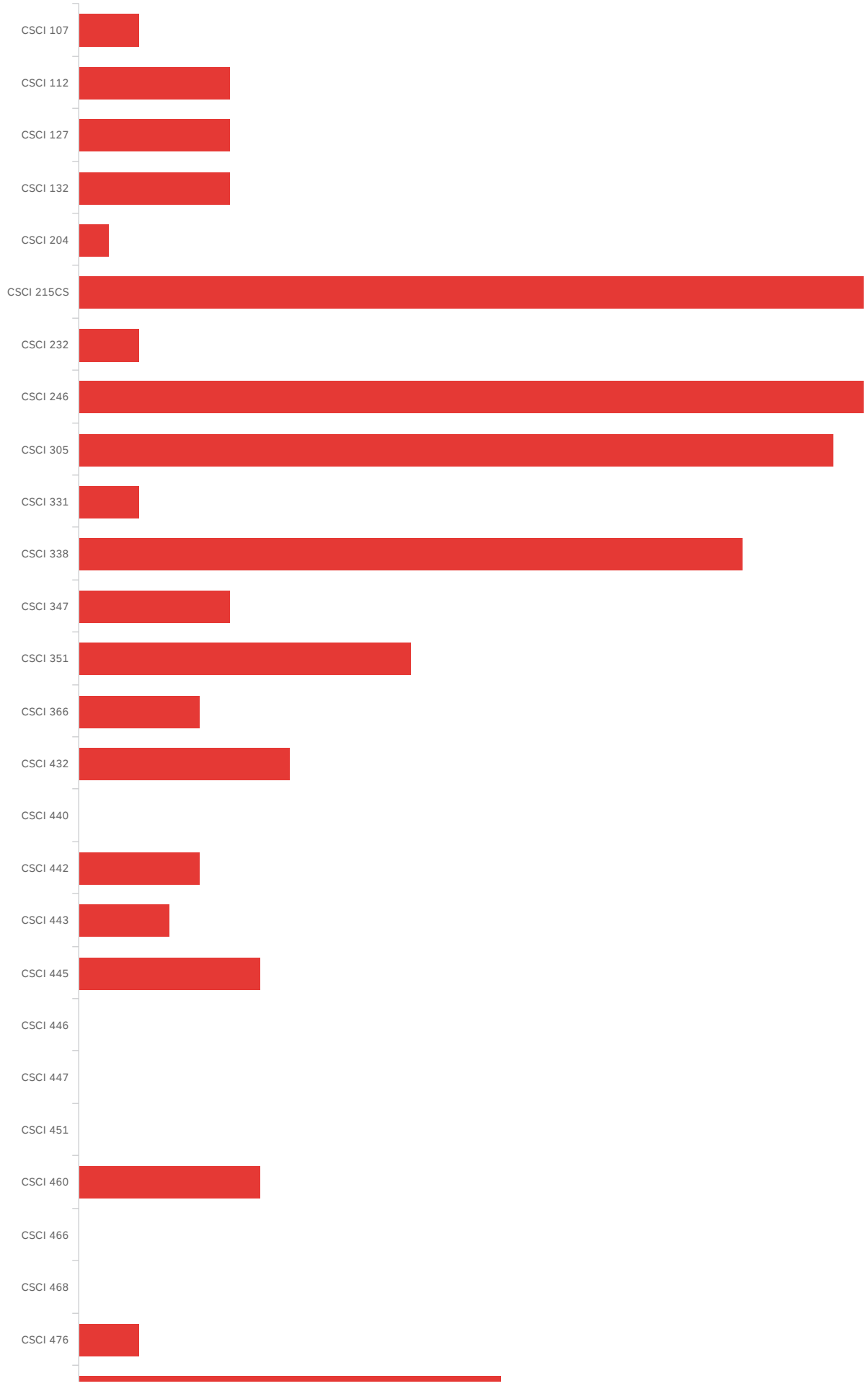
CSCI 366 was great because it gave you perspective as how software gets executed on a machine. Having this lower level understanding helps you understand the true difference between various data types and why they have certain qwerks such as numbers can overflow into the negatives or why what floating point number actually means. CSCI 468 compilers for similar reasons to above explains the fundamentals of how languages are designed and how interpreters and compilers of languages actually turn these languages into something executable. This lets you better compare and contrast different opinions/styles/possibilities found throughout different programming languages. Lastly CSCI 476 security was really valuable because it introduces you to thinking I'm gonna program this could app but how do I make it secure? what are common things to look out for and improve overall security awareness.

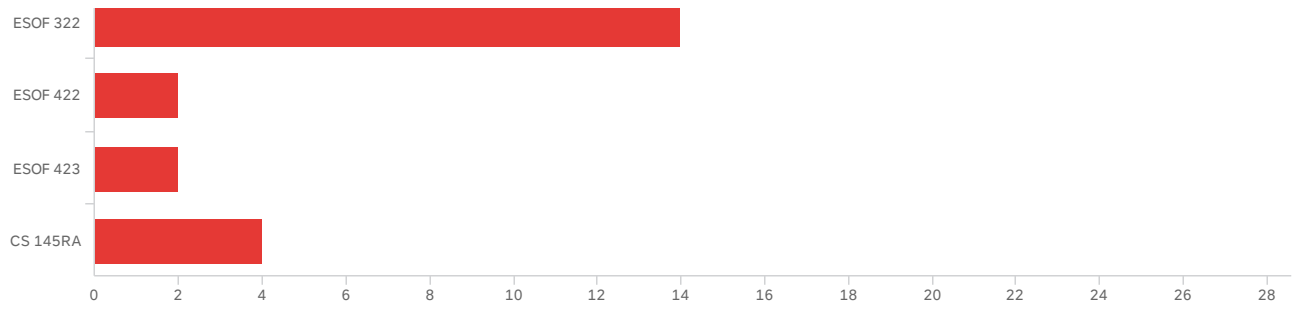
CSCI 107 - This was my first computer science class ever. I had a really great experience in this course and it caused me to pursue my degree in CS. Provided a great foundation in Python and was a great introductory class. Taught by Paxton. CSCI 366- This was a great course for beginning to learn how computers work. It was structured very well with its checkpoints (it was a Carson class) and gave great lessons on what lower level computer concepts were and how to use them. Taught by Carson. CSCI 442 - This was an interesting course that showed how computer vision worked. It was fun using different ways a computer can "see" to complete various tasks with the robots. It was fun seeing the results of your code displayed in the real physical world by watching your robot run your code. Provided useful image processing concepts and introduced ways to interface with a board. Personally inspired me to look into more embedded software because of how much I enjoyed it. Taught by Hunter.

They're the ones that taught me how to teach! --Dan

hello

Question 2 - Q2) Choose up to 3 courses in the curriculum that you found least valuable


CSCI 107
CSCI 112
CSCI 127
CSCI 132
CSCI 204
CSCI 215CS
CSCI 232
CSCI 246
CSCI 305
CSCI 331
CSCI 338
CSCI 347
CSCI 351
CSCI 366
CSCI 432
CSCI 440
CSCI 442
CSCI 443
CSCI 445
CSCI 446
CSCI 447
CSCI 451
CSCI 460
CSCI 466
CSCI 468
CSCI 476



#	Field	Choice Count	
1	CSCI 107	1.05%	2
2	CSCI 112	2.62%	5
3	CSCI 127	2.62%	5
4	CSCI 132	2.62%	5
5	CSCI 204	0.52%	1
6	CSCI 215CS	13.61%	26
7	CSCI 232	1.05%	2
8	CSCI 246	13.61%	26
9	CSCI 305	13.09%	25
10	CSCI 331	1.05%	2
11	CSCI 338	11.52%	22
12	CSCI 347	2.62%	5
13	CSCI 351	5.76%	11
14	CSCI 366	2.09%	4
15	CSCI 432	3.66%	7
16	CSCI 440	0.00%	0
17	CSCI 442	2.09%	4
18	CSCI 443	1.57%	3
19	CSCI 445	3.14%	6
20	CSCI 446	0.00%	0
21	CSCI 447	0.00%	0
22	CSCI 451	0.00%	0
23	CSCI 460	3.14%	6

#	Field		Choice Count
24	CSCI 466	0.00%	0
25	CSCI 468	0.00%	0
26	CSCI 476	1.05%	2
27	ESOF 322	7.33%	14
28	ESOF 422	1.05%	2
29	ESOF 423	1.05%	2
30	CS 145RA	2.09%	4
			191

Showing rows 1 - 31 of 31

Question 2-explain - Q2-EX) Please explain your answer to least valuable courses question

Q2-EX) Please explain your answer to least valuable courses question

I feel like a lot of the content in the selected courses were redundant. I took 305 with Lloyd and did not learn much in the way of new programming languages nor the structure of them, outside of basic AST that is. I feel that 445 and 455 are very similar in content, I have compared my coursework in 455 with that of my friends in 445 and most of the projects are nearly the same. I felt that CS 145RA doesn't really pertain to modern website building--most people will use wordpress or something similar, only developers will ever touch html.

i think that these are all good classes and I'm glad that I've taken them. they are just more specific in what I get out of them. they arnet classes that have helped me learn other things. just the main topics that they are focused on. again that's not a bad thing at all, I've just needed the information from them the least so far.

Taught by a student teacher and I overall did not get what I thought I would from the course

just didn't gain much from that class

gained nothing from it

Didn't feel like I was learning anything crazy or too difficult

Classes relay the same information.

I cant think of any of these that I didn't get something from

CSCI 127: I already knew basic level programming entering college, and this course was essentially review for me. I think it is a good, necessary course, but I didn't find it valuable. CSCI 215CS: While I think this class is helpful and needs to be in the curriculum, I have done debate for 7 years. As such, I already was able to analyze things based on moral and ethical reasoning, so I wasn't helped much by this class, though I did find it interesting. ESOF 322: I did not enjoy this class. The activities and concepts were typically annoying and not particularly helpful in any way. I'm not sure what in this class will apply to industry, but I've already seen some of the concepts rejected as a waste of time in industry. I feel learning how to organize and write good, commented code would be more helpful.

Lloyd. Also 246 was taught terribly by some poor grad student.

No comment for this question, all courses felt useful.

I have selected none of these because I got some value out of every class I took

I chose CSCI 127 because I had a lot of prior coding experience in high school, so I found that class largely to be a waste of time when I could've taken a more challenging class instead. I understand why CSCI 215 is taught and completely believe that ethics is important to learn about, but almost every single CS class covers ethics to some degree. I think that if this class is going to be required, other CS classes need to stop spending so much time on ethics when there's a dedicated class for it.

These three classes were primarily not in my interest areas.

112 teaches C a little too late to most programmers who have already found a better language as their favorite. Just making it primarily C++ might be more beneficial.

Q2-EX) Please explain your answer to least valuable courses question

I found it extremely hard to find the value in CSCI 338. The theoretical aspect was tough to relate to any real world solution and this course really felt like just a class that was there for accreditation purposes.

Taking 132 during COVID proved to be difficult for my study habits and I feel that my lack of engagement and the disorganization of that class were a fundamental hinderance in the development of my programming skills. 246 was especially challenging due to the fact that I had a hard time processing my instructor's speech while complex mathematical concepts were being described. Additionally the assignment/assessment scheduling of the class quite poor.

System Admin: The content of this class was very specific and niche feeling - I feel that I already forgot all of the content from this class. Also there was so much content covered Robot Vision: This class felt very chaotic and mismanaged, I think if a different professor taught it would feel much better HCI: I think that this course did not feel interactive enough - a lot of the content felt like common sense

I'd consider 246 to be one of the least valuable just because I haven't had to use any of the discrete structures stuff in any of my other classes. If I had to use it at some point in the future, I'd probably have to google a good amount as a refresher just because I don't really remember much. Similarly, I also picked 305 as one of the least valuable just because I don't remember a whole lot. There were a few concepts that I appreciated, such as the EBNF / BNF introduction, but I don't think I remember much about any of the programming languages we worked with. We'd do a little with one language every two weeks or so, and while I found that interesting at the time, I don't think much stuck with me.

The ethics class was by far the least valuable even considering any soft skills it might improve, which I would argue are none. Also anything taught by Dr. Lloyd.

347 Data Mining felt lacking because it was taught at such breakneck speeds that to be successful in that course you would either have to have expansive background knowledge, or just do the assignments and ignore the more in depth concepts being taught. 351 System Admin felt under achieving because it was incredibly surface level. I know that the basics of Linux and UNIX systems as a whole are useful in system admin work, but we learned almost nothing on what a system admin actually does. I am slightly appalled there is not a more advanced system administration class considering that it is one of the most accessible jobs in the CS industry. As for 445 HCI, it felt like it should have been a 100 level class. It touched on incredibly basic psychology topics, and UI elements you learn in high school.

All of the information I learned in them was also covered by other classes, and the professors I had for them did not seem well equipped to teach the material (uncaring, and without a deep understanding of the topic).

Felt very slow and uninformative.

145 RA forces people to have a partner. My partner was an art major who wanted to do all the coding and everytime they submitted code I looked at it and it was riddled with bugs and errors so I had to fix it. It wouldve been an easier class if I was allowed to work on everything alone.

107 could just be 127, 215 did not seem to encouage critical thinking about issues but just searching web for issues, 351 did not involve learning just getting by with little work

I felt like i didn't really learn much from these courses, as the subject taught in these courses didn't apply to the work force at all.

For 215CS (Social & Ethical Issues in Computer Science) I do think this course has value but compared to the rest of the courses this is the one I had to choose. I feel like this course could be improved by focusing more on how to convert strong ethics into marketable skills. For example, making sure your code handles sensitive data securely. For 366 (Computer Systems) I also felt this class has value but there wasn't enough hands on work in the class. While it did give me a better understanding of how computers work in a few areas, not much carries over into marketable skills. I again would like more hands on projects. For 443 (User Interface Design) I feel this class is too similar to 445 (Human Computer Interaction) having taken both classes, I think they could be combined into one without too much difficulty. Taking 445 after 443 feels like I am taking the same class again in many ways.

305 was a fun class but I didn't see much value.

The reason I chose these is not because of the topics themselves, but rather how they are taught and how they compound on each other. While the theory side of computer science is very important, I felt a strong disconnect between these three courses in how they are taught. I felt that my time leaning in 246 did not did a good job in preparing me for 338. 246 seemed to be mainly focused on how to read/write discreet mathematics and less about instructing us on the methods we should use to solve problems. When I moved to 338 Binhai seemed to be under the impression that

Q2-EX) Please explain your answer to least valuable courses question

everyone should have had all the knowledge needed to solve the problems he was giving us, which was often not the case amongst my classmates and I. This pattern perpetuated into 432, which is more understandable, however the lack of foundational knowledge given in 246 made both of these classes extremely difficult to get through.

The theory classes and discrete math were less impactful for my required skills while working as a software developer intern.

CSCI 305 was the worst class I have taken at MSU. There was no opportunity for imformation retention whatsoever. What was learned came in one ear and out the other. The instructor showed no importance of what was being learned.

I couldn't pick a third, and I had trouble picking these two. Data mining was neat, but didn't really feel helpful to me or to the majority of coders. It's more of an advanced stats class than a coding class and only really of use to data analysts. Concepts and programing languages just felt redundant and outdated. While the information it teaches is valuable, other classes teach the same stuff, so its a lot of pointless review. Learning the history of coding is very cool, and some old and outdated languages are pretty nice to have, but maybe this class would be better if it focused on those parts and was optional instead of required.

This class was note helpful as it was essentially us playing pretend. We did not work with any real companies like in ESOF 423, and there wasn't any coding like in any of the other classes.

I still think CSCI 432 was a valuable class, since it deepened my understanding of logic and the theory of algorithms, but I would say that this class doesn't seem like it will necessarily apply in my career.

CSCI 127 - Joy and Beauty of Data, Although it may be useful for others with less experience in computer science, I didn't find this class too useful, since its introductory python programming, and I had previous experience almost equivalent to the class. CSCI 246 - Discrete Structures, I didn't really find this class useful, I had the class that shifted professors that changed styles making it harder to adjust to each teaching style, and I didn't come out with much information from it, I can maybe remember pigeon hole principle and RSA and introduction to Big(O), but I guess its a decent introduction to computer science theory, but not as useful to those not interested in proofs and theoretical math.

CSCI 215CS was somewhat interesting but not very useful as social and ethical issues can be quite subjective.

I don't think the way they focused on patterns being the best way to program was a good use of the professor's and student's time for this class. I don't remember any takeaway from the class beyond patterns being extra work for little to no return. 338 was just difficult to follow and learn how to perform just about every one of those proofs we had and only brought up the occasional interesting and well-presented topic

I had a really bad experience in 246 and almost switched majors because of it. I really did not like the prof that taught it that year, It was in the middle of covid so it was all online, and I never understood how it tied into computer science.

I found CSCI 305 to be one of my least valuable classes, despite my expectation that it would be one of the most valuable. I believe this class could and should have cemented understanding of programming languages and helped me communicate effectively their differences, however, I found that due to the way the class was taught when I took it (including the densely written book), that the concepts were both dry and confusing.

The courses, Discrete Structures, and Operating Systems were challenging but could be managed with proper time preparation and other research before going into the class. Web development was a course that felt it taught good material and provided a good experience, except the class focused more on a project, that the TAs had a hard time understanding, than actually teaching web applications, database implementations, and modern concepts that go beyond the design levels of websites made with HTML to React Native. The first two courses mentioned had a harsh and confusing learning curve because the professors felt uncoordinated making it hard to understand even more than usual. The courses I chose just did not feel like they were teaching since I was more focused on succeeding than learning.

I have rarely used what I learned in 246 besides a few high level topics in some of my other classes, but then moved on quickly after discussing them. For 232, the class seemed poorly structured and did not really learn or understand the core concepts that were taught in the class. I feel I am not prepared for interview questions about algorithms mainly and some of the data structures that are discussed in the class.

These classes were not inherently bad, but I unfortunately took them during what had to be the most disorganized semesters I could possibly imagine. I took CSCI 246 during the semester where it was split between 5 different professors and I think the only thing anyone learned from that class that semester was how bad of an idea that was.

Q2-EX) Please explain your answer to least valuable courses question

I didnt find 132 valuable mostly because of Hunter Lloyd, its a very important class and in my experience it was terrible. I didnt find 246 valuable because of the class structure which made the topics extremely confusing. It was taught by a handful of different professors in the same semester and it didnt work at all. I didnt find 305 valuable because of Hunter Lloyd choosing to focus on older, more out of date languages instead of the tons of new and exciting languages that are actually being used.

I don't see 338 being very useful in most career paths, I think in general we get enough understanding of how time complexity works from other classes. 215CS just seemed like common sense stuff. While 366 is interesting I'm confident I and most others won't use most of this knowledge in our careers.

There were no courses that I did not find a lot of value in so it is difficult to answer this question.

I chose these three courses because some I found less valuable and some redundant, such as CSCI 215CS, felt like a class added less for learning due to curriculum requirements. While I found CSCI 338 was less valuable and not taught to the greatest it can be, I see its use but not in how 338 brought it up. Finally, CSCI 204 could have been more varied, and my semester felt like watching online tutorials to learn UNITY.

CSCI 246 - This class was taught by a grad student who seemed a little out of his depth. The actual course content felt like it was a combination of logical thinking and Data Structures / Algorithms obfuscated beyond a layer of notation. It's a tough spot though, because I understand why this class is here, CS theory depends on it, and if someone is going into true Computer Science, I could see it being more useful. However, I intend on going into SWE, and I suspect many classmates do as well. CSCI 305 - I think this could be more useful with a few reworks. I understand that the concept of the class is supposed to be a tour of modern and legacy languages, but I don't see how it's pertinent to learn Fortran and Prolog in 2024 outside of "wow I have it so easy with Java!". The projects should be moved to only be the modern languages in my opinion. It's also hard to grapple with being introduced to Parse Trees and EBNF grammar, and then never touching them again until compilers. CS145RA - This one is my fault, as I delayed taking this class until I was a Junior who had already completed half a year of an Internship with a front-end development team to knock out the art credit.

Gives little to no prep for industry, these classes were theoretical.

Talked to grads and theory is not used in the workspace at all. For the year of work experience I have we do not use any UML or chart design that 322 taught. You can also learn a lot of 351 from other classes.

Learning the information taught in these two classes felt extremely difficult. Both professors had thick accents that when combined with their relatively basic lecture slides and lack of posted lecture recordings, made it feel nearly impossible to keep up with what was going on or to review information using the D2L content. I also very much disliked the required use of the i-clickers/ i-clicker app for attendance and especially for quizzes in 347. I often found that during these quizzes, I was consistently running out of time to answer questions, not having my answers recorded, having the "correct" answer adjusted by the professor mid quiz, all causing me end up with a poor clicker score at the end of the semester.

Discrete structures and theory just seem unnecessary/not sure when I will use that

These classes while useful kinda lacked showing importance in the classes themselves

CSCI 215CS was a class that just focused on ethical issues that can come up with computing, but I don't think I needed a class to teach me about this, it felt like it was a waste of my time. I believe that each person will come across this themselves in college or in their jobs that it doesn't need to be explained. CSCI 351 had me going through the motions and I didn't learn much. It was a class that had me do something without fully understanding why and what it did. ESOF 322 was very disorganized. I felt like their was so much material spewed at us and they didn't connect with each other very well. I think this class could have been taught a lot better.

CSCI 215: This course was lacking. I think the intention to get CS majors to think about the ethics of what they create is great, but this class did not provide that. Most of class time was spent with student presentations and discussions which are easy to throw together and fluff up, but do not really make us think about the hard things. I took the course with Dr. Reinhold who towards the end started to pivot the class and teach about practical ethics and how to respond to difficult situations which was an improvement. CSCI 351: This course did not push me to learn, it actually encouraged laziness. I am not passionate about Sys Admin work, but I barely had to lift a finger in this course. Every homework was either done in class or had an online video so I pretty much was just following online tutorials instead of really learning Linux skills. Mr. Dowdle does post additional reading that could have helped but it is not tested on so I spent my time on other classes. ESOF 322: Of all the courses I have taken at MSU this might have been my least favorite. It is hard to put my finger on what exactly is wrong with the class. It seems outdated and disorganized. I took the course from Dr. Cummings and almost every time I left lecture I felt more confused and less knowledgeable on what we were learning.

Q2-EX) Please explain your answer to least valuable courses question

These courses had very poor professors teaching the material and caused more confusion than knowledge which as a paying consumer of knowledge was very frustrating.

CSCI 127 (Joy and Beauty of Data): I only found this class less valuable because of the fact I took CSCI 107. CSCI 127 didn't add much more to the concepts I already learned in 107. The biggest difference was that the programming assignments were more complex. This provided good coding practice but not a ton of conceptual value. CSCI 305 (Concepts/Programming Languages): I might think differently about choosing this class as one of the least valuable as I further enter the compilers class this semester. However, I was not very invested or interested in this class. There weren't a ton of new concepts introduced, so it felt lackluster. CSCI 445 (Human Computer Interaction): This pick is largely due to personal disinterest. The concepts learned in this class aren't very applicable unless you are specifically interested in pursuing human-computer interaction professionally.

CSCI 215CS was one of my least valuable courses because learning opinionated ethics is a waste of time when I could have been learning practical knowledge that will help us in the workforce. Teaching ethics is mainly an opinion-biased topic rather than something that has provable rules or facts. Most ethics have scenarios that force people to contradict their ethics. In class, we called these contradictions ethical dilemmas. For these reasons, I think ethics should be an elective, not a required course. ESOF 322 was another of my least valuable courses because we never had to use the UML and design principles we learned to create software. In this course, we created design documents that we would never use to make software which hampered my learning of the topics, and put this course on my least valuable list. The grading in this course was also poor because the grader gave full marks if I turned in the assignment, which made me feel I wasn't receiving any feedback on how well I understood the concepts in the course. CSCI 432 was my final pick for the least valuable course, not because the concepts were not valuable, but because it was one of the worst taught courses I have been in. The professor missed over ten days of class, which had a disorganizing effect on the class. We also received grades weeks after an assignment was due. While the grading was late, the grading was the best feedback I have received because the professor graded everything and gave notes.

I feel that the curriculum does a poor job at integrating computer science theory into the rest of the classes. They feel like black sheep, especially when nearly every other class concerns software development with little regard for the concepts of theory. I got very little out of these classes and struggled to understand how they fit in with the rest of the topics I covered.

I felt as though the proofs we did in 246 did not relate back to our curriculum or tie into other coursework.

CSCI 215CS was one of my least valuable courses because I think it is a waste of time to teach ethics when we could have been learning practical knowledge that will help us in the workforce. I believe it is a waste of time to teach ethics because it is mainly an opinion biased topic and not something that has provable rules or facts. Infact most ethics have scenarios that force people to contradict their ethics. In class we called these contradictions ethical dilemmas. For these reasons I think ethics should be an elective not a required course. ESOF 322 was another of my least valuable courses because we never had to use the UML and design principles, we learned to create software. The disconnect between creating design documents that we would never have to practically use to make Sofware put this course in my least valuable list. The grading in this course was also poor because the majority of projects were given full marks if turned in, made me feel I wasn't receiving any feedback on how well I understood the concepts in the course. CSCI 432 was my final pick for least valuable courses not because the concepts in the course were not valuable, but it was one of the worst taught courses I have been in.

I think the course material for the courses listed was somewhat lacking. For 442 the course was very scattered in showing how the individual sections built into a single lesson plan. I thought that the course lacked depth as the techniques from the beginning of the course were the only real part on the final project. After about the halfway mark of the course we stopped progressing to techniques such as image segmentation, object detection and image classification. I believe any Computer vision course should go over those techniques and the use of neural networks as that is some of the basics of where the field of computer vision is currently at. For the other 2 courses they add no real direct value to the understanding of computer science. While I do think ethics is an important class I think that the lack of structure in the class when I took it caused it to be a class that was somewhat overlooked. I think a smaller class that is more focused on discussion during class time would be beneficial to helping the concpets stick with students. As for ESOF 322 I do not think the class should spend nearly the amount of time it does on UML. I think UML at most should take up a quarter of the course and the rest of the course should be more focused on the project management (see my missing topics for more).

I'm taking CSCI 460 this semester, and while I have learned a few things so far, we spent the first several weeks on the exact same topic. I don't feel like this class has done much for me yet. This might change in the future, but as of right now it's not a very valuable class in my eyes

It's more concept and not practical. It is less likely I will also be using those concept in real life since it's so theoretical.

460- hunter first time teaching it. Learned nothing 305- didnt learn much and most was irrelevant

The teachers in this class did a poor job of keeping them relevant, teaching thought out material, and giving exams that didn't reflect the content they emphasized.

Q2-EX) Please explain your answer to least valuable courses question

I don't take those

112 - I thought the class structure was flawed. Not being able to use an IDE or equivalent is like going back to the stone age. I get the thought process, but it's an extra layer of confusion and difficulty to assignments. I do think that we need more classes based in C based languages though. 322 - I had a difficult time with how this course was taught. I do think it teaches valuable material, but as someone who learns best through "big picture" references and context, I found it difficult to understand why we were doing certain things. 305 - Again, useful content, the delivery was sub par.

215 - just seemed like a class to give presentations. I got nothing out of it 305 - this class just seemed like a filler class. The professor did not seem to really care about teaching anything but just read off of the internet and slides. Again did not seem like a class that was needed for the degree

CSCI 305 was more useful than theory, but I would've liked a bit more experience with actual languages that I may end up using rather than some of the ones that were given. The current trending languages should be taught more than a language that was invented back in the 80's or 90's that will never see the light of day. I think it is important to know where we came from of course, but we could actually learn some valueable coding skills instead of random languages that we could never see again after that class.

CSCI 215CS - Most of it was common sense.

These courses were important in teaching and explaining each of their respective niches in the CS domain, but I had a much harder time connecting their applications to the broader CS program. These classes were taught well and were engaging, but I don't know if they impacted the remainder of my learning outside of each course's particular narrow application.

I found CSCI 112 to be one of the least valuable classes because we spend a whole semester learning C to barely ever use it again the rest of the time you're in school. I found CSCI 215 CS to be not very valuable because it seemed like a major waste of time with plenty of busy work. It is my belief the only time you can teach is ethics is while a child is growing up and not as ~20 year old. CSCI 432 was the absolute least valuable class I have taken because Brittany Fasy is a terrible teacher.

CSCI 132 - I didn't learn enough to help me with CSCI 232. I think the class is important but it needs to be dumbed down for beginners to actually learn. CSCI 215CS - The class was taught well, but I didn't learn anything that feels important to my CS experience. CSCI 305 - Very confusing class. I never understood what I was learning and I felt alone to learn most of a language on my own. This is just a confusing class and hard to teach that many different languages.

These are classes that did have useful information to learn but I feel did not advance my programming skills. They did help think a little more critically about the logic and language that would be best used for a situation but they still felt like filler classes to help get to the 120 credits.

I explicitly selected two courses taught by Hunter Lloyd - I learned nothing in his courses due to him not showing up half the time. By week 7 he had missed 7 classes. He had no problem telling the class he was pursing comedy instead of teaching. He would post a lecture video from years prior that did not flow with the previous lecture where he actually graced us with his presence. In 305, we had to take tests without answer keys to understand why we didn't receive full credit on our homework. I once addressed this with John Paxton, and it was a matter of days before our homework key was presented - he had to make it. We received it maybe one day before the test and it did not align with the TA's grading - eg: TA marked it to be correct, Hunter's answer key said it was incorrect. It is incredibly unfair to students to walk into a test thinking they understand a concept or specific question to then get it wrong because the professor never communicated the correct answer to the TA or class? I also marked 246 - taught by Binhai - because I couldn't even tell you what I learned and finished with a grade I know I did not deserve. A friend in the course felt the same way, passed with flying colors when the one thing we were confident in was that we had no clue what was going on. Please find more instructors like Reese, Carson, Sean Yaw, and Maryann - the only professors I had who I genuinely felt wanted to be in front of students and help them understand crucial course material. I felt my time (and LOTS of money) was wasted in other courses.

CSCI 246, 338: I do not know a single person who enjoys these classes or sees the value in learning them. Everyone dreads taking them. They are boring, very difficult, and it is not made clear why we are taking them. Theses classes did not improve me as a computer scientist and will not help me succeed anymore in any career. Theses should be optional classes and not required by any means. CSCI 215CS: I do not think this needed to be an entire class. I think the topics are really important but I think they should be brought up in every other class. The class itself felt like a lot of busy work and was very easy, it never forced me to think very hard.

I am not particularly interested in these forms of Computer Science and never really see me using these skills.

CSCI 338 felt like a blur, and I got through the class but its easily the one that I've forgotten the most about

Q2-EX) Please explain your answer to least valuable courses question

While I see the need to understand the Ethics regarding the field of Computer Science, I think it should be taught throughout the curriculum and not be its own class. I did learn from it though.

The courses that I selected felt frustrating to take because I did not see their application to real-world scenarios. Specifically ESOF-422 had us using a language that appeared to be abandoned years ago, it's official website for documentation was far from complete, then in the second half of the class we weren't even taught by our professor, but rather by a "guest lecturer". The content of the class was also far from the scope that was outlined in its description.

I felt that some material covered early-on in CSCI 132 was a repeat of material covered in some lower division CSCI courses like 127

N/A....each class adds to a more well rounded knowledge

N/A...I think they all served different purposes and everyone is going to benefit from each class differently.

CSCI 338 was a class that called for being discrete/specific yet used plain nuanced confusing English for proofs and such which was infuriating. I watched what felt like countless videos online to supplement the material to little success and came away feeling like I learned nothing. I now feel permanently scarred and mortified at the thought of hearing the terms "theory" and "computer science" in the same sentence. CSCI 246, another theory class type class go figure was taught terribly when I took it. On many occasions, they would randomly pause for 30 seconds at a time while lecturing (while we students just starred in silence) so they could look over the slides they took from the textbook verbatim without, it felt, ever looking at them before class. I also came away learning nothing from this class which is probably part of the reason I struggled so much in the following CSCI 338 theory class.

CSCI 246 - The course was confusing at times and the relevancy was not always explained. This was also taught during a time where the department was scrambling for an instructor so maybe that factored into it. CSCI 338 - No offense to Binhai but I felt that the class was really confusing at times and the relevancy of concepts was not always explained. CSCI 232 - Was a little difficult to fully understand the data structures and algorithms that were being presented. More explanation and walkthroughs might have been helpful.

I chose them at random. Nothing against them. --Dan

hello

Question 3 - Q3) Are there any important topics missing from the curriculum?

Q3) Are there any important topics missing from the curriculum?
I don't see any major gaps, maybe some more exposure to industry practices. I definitely had to learn a few new dynamics and topics when I started my first internship.
not that i know of
A strong lack of curriculum based around what we may expect to face in the workforce -- I am in a seminar course as a senior that is only now imparting of how incredibly important git is in the workforce and we have largely not been taught about it. In general, we do not know what to expect when we make the transition from school to a career
Nope
NA
I cant think of any
Maybe code commenting/readability. This is covered with Java doc comments, but just a bit more focus on writing good code could be nice.
An actual embedded systems class that isn't just using a R-Pi.
None come to mind.
I would have liked more security classes, but that is likely due to my interest in the field. The security class would have been more fun if it was broken up into other more in depth classes.
I have a few recommendations. In some of the first courses students take in the cs curriculum there should be explanation of git and how to use it. I also think one of the first classes should give a high level explanation of everything cs, including networking, databases, etc. This would help students learn easier in the actual classes for those topics rather than learning from scratch. I really like the format of this video. https://youtu.be/8mAITcNt710?si=l-VpZmT6l2W2mX8e
I think a CS Education class would be valuable to learn about how to teach CS topics, both for teaching at a K-12 level or just communicating with other disciplines who've never coded before
Not that I am aware of. Industry tools would be good, however that is sort of available in a 495 seminar I am taking.
Teaching about containers such as docker and Kubernetes might be beneficial.
It could be extremely valuable to begin working in source control right away in lower level classes and make it a standard practice in all courses throughout the entire program. It would also be valuable to have some upper division electives dedicated to learning newer technologies, i.e. front end development, mobile development, newer backend technologies, etc.
The 494 Industry Standards seminar needs to be turned into a full fledged, required, 3/4 credit course. Students should not have to learn a standard development cycle outside of school.
no
Not that I know of. I feel like there's a lot of important topics that are electives and not required, which makes it a bit difficult because obviously not everyone is going to be able to take all of those. Maybe one of those electives that is considered most "important" could be made required so that

Q3) Are there any important topics missing from the curriculum?

all students have experience with it.

See Industry Methods, ask this question to Devin Gray or other industry professionals.

Again, I cannot believe there is not a more advanced system administration class. Also, all of these classes feel like they are not preparing you for a job in the industry, and instead aiming you towards a graduate degree. I understand there is monetary incentive to do so, but I find that quite disgusting. Most computer science undergrads will go into the working industry, so having no mandatory class that goes over databases, version control, DevOps, and fullstack development is lacking in so many ways that I cannot list them all here.

No.

Get more real world classes that focus on a specialized industry, we are competing with chat GPT and the best way to get an edge is by allowing students to specialize in a topic, but the college just teaching the jack of all trades which isn't very helpful for job searching.

true data classes using tablue

No

The world of computer science is always moving fast with new technologies popping up every day. I think a course dedicated to highlighting some of the new and fasting growing technologies would be super useful. This would be difficult because the curriculum would need to be adjusted each year but the I believe it would be worth it to give students a clear picture of how to keep their skills sharp and stay ahead of the curve after graduation.

N/A

Not that I can tell, I feel that the college does a good job of offering a variety of classes and topics to study.

There should be more focus on databases interview prep courses.

I think that there needs to be more innovative courses at MSU. This field is ever-changing and many of these courses are outdated. We need to have more classes on AI and frameworks that students will be using when they get their first job. There needs to be more classes with code-heavy material.

MORE CYBERSECURITY. That one class showed a ton of problems with the way I and my peers were developing. Not only should that class be mandatory, but there should be higher level versions that go deeper into the concepts. A bigger focus on agile development, documentation etc would also be very very helpful. And I think we could do with some one credit classes dedicated to in depth learning of new cutting edge and older rarer languages. I would have loved a 1 credit class that gives an overview of COBOL or Jquery. Just a way to really focus in and master that tool specifically, maybe some in depth stuff on how the language is structured compiles etc, but mostly what it can do, where to use it and how to make use of it's advantages.

There should be more classes like ESOF 423. Working on one large project makes it more worthwhile than 30 small programs. Especially when students have to work in a group, and use tools like Github. Also, Github should be taught in the lower level classes.

Computer graphics! That was one class I knew for sure I wanted to take, but then it wasn't offered.

I took mobile app development as a seminar, that would be cool to have as an actual class, but I would definitely say that there should be more electives in all computer science topics, more robotics, more cybersecurity, more networking, etc.

I would have liked more cybersecurity courses instead of just one basic course.

I would like there to have been more emphasis on professional practice beyond introducing patterns. Something more of what professor Gross is doing with his projects if there is any 300-400 (MAYBE 200 if it's possible) level class that is able to create something similar

I wish we would of at least had one section of one class on block chain

Q3) Are there any important topics missing from the curriculum?

I think learning some of the important tools/methods used in CS earlier would have been massively helpful. This includes things like git/github, unit testing, debugging, and IDE mastery. While these topics are covered in the Industry Methods Seminar and are often touched on in classes taught by Carson Gross, it would have been nice to have a better and earlier introduction to them. I think especially in CSCI 132/CSCI 232, getting a better handle on the IDE I was using would have helped tremendously with my understanding of how my code was working. I also think it would be helpful to have a more thorough introduction to the Model-View-Controller design pattern in ESOF 322, as I have used that pattern in other classes and in my internship, and it would have been helpful to have a deeper understanding prior to those instances.

I think artificial intelligence, with proper definition and ethical implementations, needs to be a required part of the curriculum with how much it is being implemented. I also would say that new cybersecurity courses would help to teach concepts of security implementations.

No

Personally, I think there should be an early seminar course teaching students how to use vital industry tools like git, github, command line, etc.

No

I think having to build a fulling functioning app is something that should be required throughout the curriculum.

I feel that AI (CSCI 446) should be split into two classes, such as a 300 level class and a 400 level class. It is a very important topic that I feel had to be crammed into one class, I wished there was more explanation and expansion available on the topics we went over to help me better understand.

The only thing I can add with my current understanding is more practical skills-type courses, like EGEN 310R, but more software-oriented, being focused on CS students such that we can put the skills we've learned to the test.

I feel like Databases should be a required class. The process of deploying code could be covered in more depth as well, like interacting more with Docker and containers outside of just spinning up pre-build images in computer security.

There needs to be a course taught in some sort of Javascript framework.

Just an overall programming course. Something that just has projects and you can create the project with whatever language you desire.

I would have liked to have taken an additional computer security course.

I wished we continued to get coding assignments like we did in 132/232, as I feel like I'm forgetting some of the basics just because I'm out of practice

One thing i would have like would be having to explain face to face with someone what my code was doing.

Not to my current knowledge, no. But it would be nice to know how to solder or do a little more hybrid of CSCI and an EELE class, where it's coding and hands on.

Not that I can think of. It is hard to say since I haven't working in industry yet.

I think that there should be more data science, networks, and cybersecurity classes available as electives for computer science students. I also personally feel like EELE 261 (Intro to Logic Circuits) is a very good class for computer science students to take. I realize that this is an available elective, but I honestly feel like it could be required. It reinforces concepts learned in computer systems and teaches you a lot about low-level computing. More career advising would be good.

I think it would be valuable to incorporate more math courses into the curriculum. For example, I believe the curriculum could benefit from requiring methods of proof and then taking a discrete course.

I would have liked to see some more in-depth game design courses, as the only one available was quite barebones and broad.

Q3) Are there any important topics missing from the curriculum?

I would've liked the opportunity to learn the tool figma in a course.

I think it wolud be valable to incorporate more math courses into the curriculum. for example

Version control should be taught from the very beginning as a portfolio building tool as well as a safeguard for students (if their computer dies they can still have a record of all of the code that they have created). They should also switch software engineering to focus more on common project architecture (I.E. microservices, web application structure, deployment environments, testing, etc.), test driven development, debugging and logging (debugging should be taught in 127 and their should be teaching on when/how to use debugging vs when/how to use logging), code comprehension (simulate jumping into a large project that you didn't write and having to understand the previous code), and tools used in industry to manage teams/code bases so that when getting first jobs. These skills don't have to be taught in Software engineering, but I think that software engineering should focus less on UML and more on the skills listed above. However, I believe that those skills are skills that will allow students to more easily start their own projects and manage their own code, this would make them more well rounded computer scientist that are also more marketable for industry. Build systems is another skill that could be taught as I know very little on this subject (could be taught in the 112 if you have a semester long project that shows how/when to use tools to build from source). I think their should be more teaching on what importing libraries/modules is doing as it felt like it wasn't emphasized enough on what importing is doing (useful when using dependencies just to be able to read the code that you are using i.e. what data type is a numpy function returning).

I think it would be a good idea to teach students how to use git sooner, but since it's been 4 years since I started at MSU I don't know if they're already doing this in the lower level courses or not

No, everything is already in the curriculum

imbedded systems programming, with swap (Size weight and Power) advanced c++

No

no

I would like to see more classes that use C/C++ or C based languages. We get a lot of Python/Java, which is fine, but I'm more interested in C.

Going through the classes, there are very few that taught us how to deal with problems in industry. They give us "educational" ways to deal with coding/programming/development problems which does not help in the future. In my experience, I learned more valuable information when working in the field then I feel like I did in classes.

Hands-on system courses would make a great addition to teach the troubleshooting of system issues and errors. Almost any IT job requires you to be able to fix systems for clients.

A course on AI might be nice to have as it becomes more and more prominent.

Not that I can think of.

I think cloud computing should be part of the curriculum.

I think more things like Docker, kubernetes, Angular, AWS. Some big things in the CS field that employers are looking for that we have no experience in.

I'm not entirely sure about any specific topics that are missing from the curriculum, but overall we could use some more security classes for those interested and maybe some on application development and actually publishing something. I still feel a little confused on how to get the code out of the IDE and into something the user can use.

I probably can't answer this question until I've been working in industry for a year. I won't know what I'm missing until I find myself in need of it.

None that I can think of.

Q3) Are there any important topics missing from the curriculum?

I would have liked to see a little more on computer security. I feel that the current class is great but with a new topic every week, I have some knowledge about many topics. I would have liked to have two security classes so I know more about those same topics.

None that immediately come to mind

I would like to see more topics relating to hardware offered as part of the CS - Professional degree. Also would like to see more on cyber security.

I think it would be good to introduce linux and github earlier in the curriculum. Each have been invaluable in my job experience and I think it could be touched earlier/more in-depth.

I believe an intro to proofs course (Methods of Proof would be great) should be a required part of the CSCI degree, as without it, required courses such as Discrete Structures and Computer Science Theory would have been much more difficult than they already are.

N/A

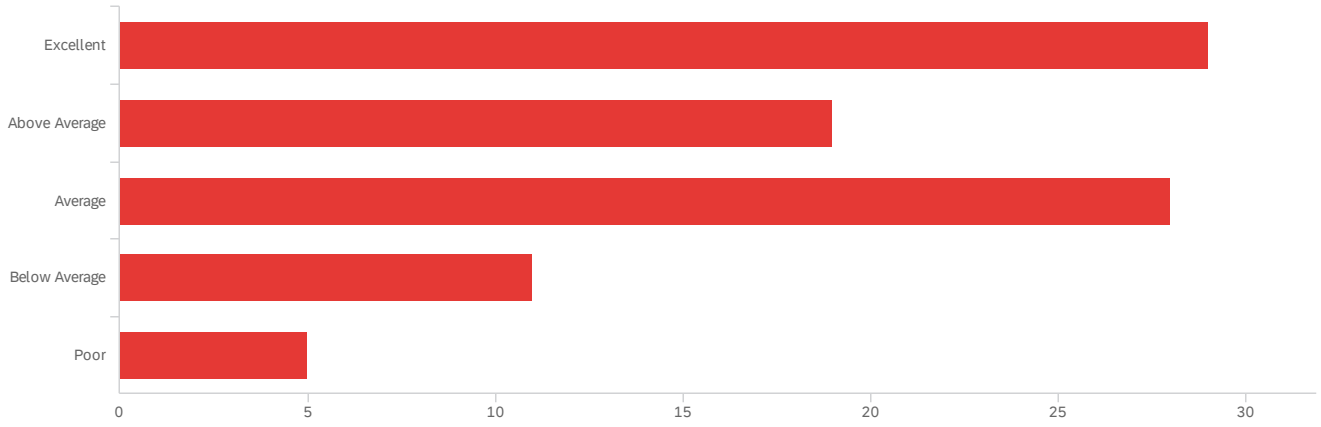
N/A

I think there needs to be more application/practical courses where we are using skills to do work we would be doing in industry. The only courses I can think of that are sort of like this are 331 and 423. I think if students were exposed to more practical courses that are diverse in the field they represent that this would be useful, even if it's just a 1-credit seminar. Something like more applied machine learning (or other data science), more backend applications, embedded software, etc.

Technical Art!

hello

Question 4 - Q4) How do you rate your advising experience?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q4) How do you rate your advising experience?	1.00	5.00	2.39	1.20	1.43	92

#	Field		Choice Count
1	Excellent	31.52%	29
2	Above Average	20.65%	19
3	Average	30.43%	28
4	Below Average	11.96%	11
5	Poor	5.43%	5
			92

Showing rows 1 - 6 of 6

Question 4-explain - Q4) Please explain your answer to the advising question

Q4) Please explain your answer to the advising question
My advisors were Sharlyn & Clem Izurieta, I was able to ask Shar tricky questions whenever I needed.
i was a pain in the butt but my advisor was patient and very helpful for me to get everything done that I needed to.
Advisor did their job with little issue
it was basic and meets the minimum requirement
Simply great most of the time, but wish I had better insight into courses
Advising was experience was generally good. Sometimes it was hard to reach my advisor.
It felt like I constantly had to deal with some arbitrary nonsense.
I have never had an issue with Carson as an advisor. I typically knew what classes I wanted to take and do, and this worked out well for Carson. There were a couple times I needed help, and even if he didn't know the answer, Carson knew exactly who to get in contact with to fix the problem, which is so helpful. I heard a lot of stories of people having issues with advisors, but Carson was always competent.
Dr. Cummings made all of my general advising appointments very productive. She also gave me great resume advice on several occasions.
My first advisor, Sharlyn, was very helpful my first and second year. I never felt the need to talk to an advisor much after that.
My advisors have all seemed interested in my success as a student here at MSU. I did have difficulty as a transfer student understanding what I needed to do, but I think that was mostly due to Covid.
It was easy to receive answers to my questions when I needed them
John Sheppard is my favorite professor I've had here, but he should not be an advisor. There was no way to set up an appointment with him, so you have to meet during his office hours and compete for attention with students asking questions and I don't think I ever got any actual advice from him like I had gotten from my freshman advisor. It doesn't seem like he has any desire to be an advisor, which I could see hurting other students who want a more attentive/caring advisor
Nothing notably great or terrible, as such it was in the good to average range which isn't necessarily a problem.
My advisor was really great at getting back to me, but did not know much about the courses.
My advising experience early on with Sharlyn was amazing, but after she left and I began going to my advisor, it became very below average and I felt like I was doing my advising myself, and just asking for my registration pin after I did my scheduling.
Mary Ann Cummings is an excellent advisor and was a source of comfort and guidance throughout my degree.
I had a very responsive advisor, But part of me wishes that the advisors would reach out to try to plan for students' futures a bit more, in terms of classes and career paths - especially because a lot of courses in CS are only offered once a year or sometimes even less
Sharlyn Gunderson-Izurieta and Dr. Mary Ann Cummings were amazing advisors. I grew really close to both of them and I was really lucky to have

Q4) Please explain your answer to the advising question

them during my time at MSU. They are very knowledgeable and always answered my questions in a timely manner which I really appreciated.

I did not once talk to my advisor.

Bring Shar back. She was the best advisor I have ever had in my life. Brittany Fasy did not care at all about my success.

I had a mix of experiences - while the first advisor I had was fine, the one I was assigned later was very difficult to get ahold of and dismissive of questions I had.

My advisor was slow to respond to emails and largely unhelpful when meeting with them.

Dr Mary Ann Cummings is the best person ever.

Overall my education was valuable but could use more real world projects that I could use on my resume for marketing myself.

If my advisor had more training i would have given them a higher score.

I transferred to MSU Bozeman from MSU Billings and there were issues that would pop-up here and again because of this when it came time to enroll for new classes. However, my adviser was not as helpful as I would have liked in these situations. I had to frequently argue that I should be allowed to take certain classes because I took the prerequisites in Billings even though the course number didn't match. He just seemed unfamiliar with the transfer process which meant I had to do most of the work myself.

Reese is a great advisor and easy to talk to.

Dr. Sheppard was a very good advisor. He was honest and to the point about any questions I may have had. He also gave me a lot of helpful information on any topic we were discussing.

My advisors changed a few times during my 4 years and while I never really needed advising I didn't get time to build a relationship with as advisor.

My advisers were not knowledgeable on what was best for me. There were multiple errors made in my scheduling and its clear that many advisers simply do not have time to help create quality plans for the students.

Professor Cummings is excellent. Need I say more? She was always available and helped me design a course load that worked for me. Her knowledge of the subject was immensely helpful in determining what classes to take and I highly recommend her to anyone!

He was able to answer any question I threw at him, but I had to do a lot of my own research into the electives that were available.

My advisor always helped point me in the right direction when I had questions about classes or careers or what electives would fit my interests.

My advisor was incredible, he would respond within a day or two and after hours, I had no issues at all with advising.

I was able to register for classes every semester with no issues

I wasn't made aware of a lot of things that ended up being important, mainly deadlines and that I needed to register to graduate, who to register with and where to go from there which was frustrating. I have been able to deal with it though.

Was always helped promptly, staff was always willing to meet and talk things through with me.

My advisor at the beginning of the program was Sharlyn, who was fantastic. My advisor since has been Dr. Cummings, who has provided excellent guidance and help in tracking down answers to my advising questions.

Q4) Please explain your answer to the advising question

I got a professor for graduation school courses and research laboratories at MSU, the advising felt unguided and was more of a way to progress by my own decisions. I felt unguided in many parts and felt hesitant to reach out and connect with my advisor because I would want to meet in person. I also felt that when meetings did happen there was no advising, just agreeing with my choices immediately.

My advisor is ok, as they reach out for the important deadlines. There were some things that they did not know and was told to ask Paxton or Lloyd which was tedious as my schedule did not line up with office hours for them.

I genuinely feel blessed to have had the advising experience that I've had. Between Sharlyn and Shane alone, they offered so much help and support and then through Clem, I ended up getting the job I plan to work post graduation. Nothing but excellent things to say about my advising experience.

Whenever I needed help with signing up for classes my advisors were always super helpful.

There were a few times where my advisor failed to bring up issues with my schedule, so I had to go through other people for advising. They also emailed me the wrong date to apply for graduation, so I was behind on that.

Both of my advisors were always available and able to solve any issue that may arise.

My answer is that after my first year and the first half of my second year, it became less insightful and helpful when interacting with my adviser and more like a simple transaction. overall, it wasn't bad but wasn't excellent. If I needed answers to my questions, other departments, such as Registrar or Student Accounts, varied depending on person and time of day.

I really only interacted with them to get classes scheduled, so I almost didn't have an advising experience.

Always responsive and helpful with choosing classes.

Got what I needed, nothing less or more.

My advisors have always been able to respond to my questions in a helpful and timely manner.

Sharlyn was super helpful and knowledgeable, both Mary Anne, Sean Yaw, and Shane Blanchard were also super helpful and direct with what would be best for me!!

Helped me out a ton just overlooked the fact I had classes picked this semester that werent being offered

I felt like it was an okay experience, the only time I ever reached out to my advisors was during registration to get the pin number. They didn't go above and beyond, like suggesting classes that they heard was good or that I might be interested in. And they also didn't hold me back from registering for a lot of credits or saying that I couldn't do it. So they were pretty average.

I like to plan out my coursework and look into classes before I take them so I do not rely too heavily on my advisors. There have been a few times when I went to CS faculty and they were helpful, but other times when they steered me in the wrong direction. The worst advise I ever got was "CSCI 446 AI is project based so it isn't to bad." I will explain later in the survey.

My Advisor Professor Mumey has been the very best professor I have had in all my years. I can't thank that man enough for his time and energy.

My advising experience hasn't been anything crazy. I would determine the classes I wanted to take for the upcoming semester. Then, I would contact my advisor for their approval; usually, there was no issue. Finally, I would get my PIN and register. Then rinse and repeat. Now, with Dr. Clem Izurieta as my advisor, I am planning on pursuing a graduate degree in cybersecurity here at MSU. So, I imagine my advising experience will change and become more valuable.

I think the advising experience was below average because my advisor was a professor whose main focus was on teaching, not on advising. I found that my advisor couldn't answer questions and usually would point me to someone who could answer my questions.

Q4) Please explain your answer to the advising question

Two out of the three advisors I had were very helpful, however, one was the opposite and I often had to send several emails before I got a response.

I avoided using Dr. Stanley as my advisor whenever possible due to poor experiences in my sophomore year. She did not help me in deciding classes- or have much of any information on specific classes I had to take and what they entailed. She did not have any information to help me when I was studying abroad either. Instead of using Dr. Stanley, I reached out to Shane or Sharlyn.

I think the advising experience is below average because my advisor was a professor whose main focus is on teaching not on advising. I found that my advisor couldn't answer questions and usually ended up pointing me to someone who could answer my question.

As advisors go I got lucky with Sharlyn Izurieta and Reese Pearsall, I believe that they have done a great job in keeping me in the program especially through COVID where without Sharlyn I would have quit college.

Sharlyn was incredibly helpful to me during my first few years going through the major, and after she left, Paxton was excellent to me as well. They always helped me feel like I was going in the right direction whenever I was unsure of what classes I should take, or just whenever I needed advice in general

Advising is perfect, I get all the help and resources I need.

my advisor was amazing

While I enjoyed my advisor, they were unsure of the curriculum and could provide very little assistance when asking about courses.

because it is average

Didn't particularly like my advisor, she was not the first person I would go to for advice or help.

I had one good advisor that could answer all my questions, then the school did a shift in employment and everyone in the CS school was just placed with random professors for advisors. Then it was hard to get any help or advise on classes or where to go next.

Both Mary and Sharlyn were fantastic advisors. Super helpful!

All of my advisors were very helpful!

I was in a unique position in that my CS major was my 2nd degree I decided to pursue, but my advisor did an outstanding job of meeting with me each semester, discussing my options, and making informed recommendations about the various paths I could take in order to complete my degree.

Carson is a wonderful teacher and goes above and beyond in that aspect but he lacks in the advising aspect. This did not effect me very much because I generally knew what classes I had to take.

Never helped me figure out classes. Never knew how to answer questions. Never gave me helpful advise.

I had a great advisor that listened to all my inquires and took time to help me set up my schedule and help choose classes that I was interested in and wouldn't overload me on work for the semester.

Sharlynn was passionate about helping students and I am so glad I had the privilege of being her advisee.

I never had any problems with my advisor. I always got the help and guidance I needed and when I needed it. They made course recommendations too.

I was assigned a new advisor several times and haven't met half of them. The last one seemed to not have enough time to talk about my schedule like I wanted and was only able to respond via email. But even through this, I was able to find another advisor that wasn't assigned to me but was

Q4) Please explain your answer to the advising question

still able to help me in every way I wanted in an advisor.

Hunter Lloyd

Everybody I have talked to, family and friends, that didn't go to MSU said that the advising sounds subpar compared to their experiences. I took classes that ended up not counting for anything.

I had Carson Gross as my advisor and he was awesome in working with me to achieve my goals. He isn't perfect with some of the technical/paperwork aspects, but was always able to get something sorted even if it took a little extra time.

I didn't often need advising help, but my advisor answered my questions when I had them in a somewhat timely manner.

Some advisors have been excellent and others do not seem to have enough explicit info to help students.

It was difficult to get explicit information from some people but then others were amazing.

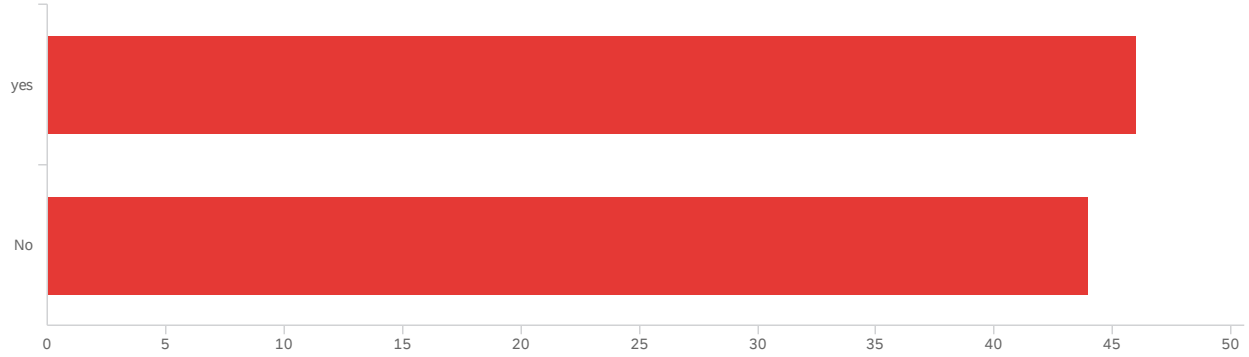
It was ok. Not much input. I had to do a lot of figuring out myself.

Sharlyn helped me my first few years here and she was great. I've had Sheppard since then and he has been a good resource as well.

I wouldn't take advice from me. --Dan

hello

Question 5 - Q5) Did you participate in an internship?

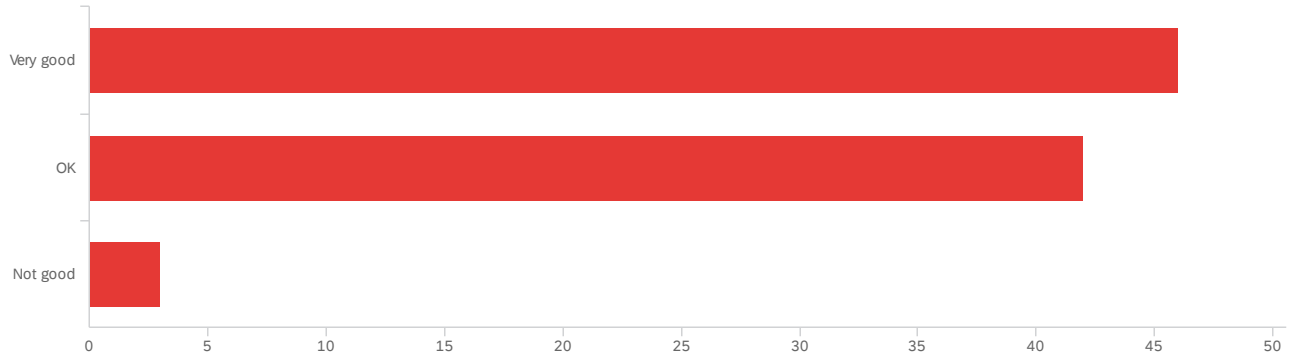


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q5) Did you participate in an internship?	1.00	2.00	1.49	0.50	0.25	90

#	Field		Choice Count
1	yes	51.11%	46
2	No	48.89%	44
			90

Showing rows 1 - 3 of 3

Question 6 - Q6) How would you rate the quality of the communications (emails, CS website, discord, etc) you received from GSOC?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q6) How would you rate the quality of the communications (emails, CS website, discord, etc) you received from GSOC?	1.00	3.00	1.53	0.56	0.32	91

#	Field		Choice Count
1	Very good	50.55%	46
2	OK	46.15%	42
3	Not good	3.30%	3
			91

Showing rows 1 - 4 of 4

Question 6-explain - Q6-EX) Please explain your answer to the communications question.

Q6-EX) Please explain your answer to the communications question.
I found it easy to ignore the emails after a while, there were a lot of things that I felt didn't pertain to me so I started to ignore many of the emails.
i dont know what gsoc is
I was generally aware of things going on within the school of computing but not always perfectly informed.
again basic and meets minimum requirement
Can be a bit much for me, but I am also very particular with what messages and communications I receive
Excellent communication channels provided.
it seemed fine
I never had issues with communications, emails and Discord were all very good. The website did not seem to helpful in terms of communication, though I never had to use it, so it never impacted me.
I don't think I interacted with them very much.
I did not engage in GSOC communications.
I received quick and informative responses
I always felt informed as to what was going on
The use of discords for some classes has generally been extremely helpful
It got me the necessary information that I needed without being too overwhelming.
Course communications through discord was very good, however I felt like I would often find out about GSOC events days and sometimes weeks AFTER they had happened which was frustrating for events I found interesting.
I enjoyed the discord server used for multiple of my CS classes.
Paxton is great
I think the quality of communications are very good. I feel like sometimes there was almost too much, like all the notifications of people defending their thesis (I feel like that should be aimed more towards grad students than undergrads), but I'd rather have too much than not enough so that I am still aware of what's going on in the department.
I mostly keep to myself so I don't think there was any really important communications from the school that I cared about.

Q6-EX) Please explain your answer to the communications question.

I liked knowing about events and opportunities, but felt like I received so many individual emails that it become a bit overwhelming.

All the information was communicated clearly and through approachable mediums.

Idk I dont pay attention to them

Needs to be more standardized between classes. It often had to dig through all places to see messages from all classes

I use discord all the time so having notifications appear their is convenient.

I never felt out-of-the-loop in terms of events, class activities, homework, etc... If I ever missed something I only had myself to blame.

Good communication via discord and email

I felt that the discord really allowed for communications to shine in the computer science department. It allowed professors and students to have a public forum to discuss many things whether it be class related or extra cirricular.

There is plenty of communication about upcoming events and course details.

There is lots of communication between staff and students available for those that want to be active with it. I think that all freshmen need to be made aware of these opportunities as I was not aware until my sophomore year.

Told me lots of stuff about things that are relevant to student life and very little about things that were relevant to my classes major etc. Emails about upcoming due dates would have been a godsend.

Discord was the best way to communicate for day to day comms, and emails were helpful for more important big picture comms.

It's awesome that the school of computing has so many students and professors actively reaching out to help each other on discord! I don't usually read the emails or look things up on the website, though.

All school emails sort of meshed together, so when the school would send a bunch of non-important information an important communication would be missed in the group sent, the website is alright it would be good to further include instructions for forms, as I found that I would have to send extra emails in order to get the information. The discord is alright but doesn't have all the courses and with some discords being separate made it a little difficult. Not terrible, not amazing, about average.

It was fine

Really enjoy the options that were available and I feel it worked out well

I was never not informed on anything, I just wish profs would use D2L more so all my classes are in one spot and I don't have to jump around from webpage to webpage

I think most of the communications I received from GSOC were timed well, helpful, and informative.

I think the communication with the department was good and provided some resources to students to help them pursue new opportunities, courses, and organization events. I also think it had a strong focus on graduate school and navigating students to focus on computing in many different avenues. I do feel the communication does not help students to look beyond school and more into the careers of computer science, the club organizations helped with that much more.

Not all professors are good at communicating with students or make it difficult to get help on assignments and projects.

Q6-EX) Please explain your answer to the communications question.

I felt that the department was very prompt and clear in necessary communications.

The GSOC sent a lot of information but I feel like a lot of events were either miscommunicated or completely disregarded,

Discord worked well for me for the classes, but receiving information from the department via email regarding things going on within the department didn't work it seems I got removed from the email list a few times or didn't receive emails.

The communications I got were always easy to access.

Overall, I had a great experience with communications, such as Discord and email responses, as they were quick and helpful whenever I was behind or needed insight into a problem.

Quality felt fine, frequency felt fine. Don't think much needs to change here.

each professor has their way of communicating which makes things messy.

Got all my responses in a timely manner.

Each seemed to work well.

Good info, always helpful

always got good heads up from professors

I felt like I knew most of the time what events were happening in the GSOC community from their emails. I really appreciated getting emails for Undergraduate TAing positions.

I did not get access to the CS discord until this year. It would have been nice to have it in previous classes.

Very good

Not too much to be said. I personally never had any issues with communication. I enjoyed certain professors' use of Discord for communication.

I think the quality of communication was very good. Both professors and advisors would promptly respond whenever I reached out on the named platforms.

Most classes did an excellent job of keeping everyone up to date, with any class that used Discord almost guaranteeing that due dates and expectations were crystal clear. There were several classes that did a rather poor job of allocating communication resources but they were the outliers.

I think the quality of communications was very good professors and advisors would respond promptly whenever I reached out on the named platforms.

I did not notice much of the communication from GSOC as I feel as though I have a lot of spam from NACOE, President Cruzado, etc.. I think opportunities should be handled another way other than emails, and emails should only be used for the most urgent updates, to-dos and opportunities. GSOC specifically doesn't really violate that rule but the other University organizations flooding my inbox doesn't help make me take time to look specifically for GSOC.

I always felt like I was well-informed of club events, opportunities, and a wide range of other things thanks to the quality of the communication shown by the School of Computing

Q6-EX) Please explain your answer to the communications question.

Communications is good since it sent out important updates we need and easy to contact to if we have questions.
communications were passible
Discord was a good way to communicate to students
It was fine.
works ok
Good in some areas, poor in others. One thing that was often slowed the learning process was just the amount of software we needed to use to stay up to date on class/homwork/exams. One professor might have a personal website, the other uses D2L, another uses a google drive folder, etc. I wish there were a central place to check on a calendar, or communications, or what not.
Beyond a select few professors who actually paid attention, I felt like there was really no communication from the CS school.
The use of discord and other types of group communications made passing the course a very easy and simple way of getting with partners and finding the help you needed.
Discord channel was nice and I did receive weekly emails from the CS department.
I constantly receive emails about clubs, jobs, and other opportunities available to CS students both on campus and in the broader CS community.
I loved the use of discord to communicate but I felt like I received many emails that did not pertain to me.
Communication is good but could be better.
Professors, advisors, staff were all quick to respond no matter the communication method used. Discord was fast and you can tell when someone is one. Emails would me answered in no more than a day and the website was up to date. Even on the weekends I was able to get a hold of someone.
I found the discord server to be very helpful.
I never really looked at the emails from GSOC. The website had good information.
I was constantly in the loop though emails and felt that I knew about all events happening within GSOC.
Sometimes emails I sent just wouldn't get picked up by anyone and I would have to reach out multiple times before I got an answer
They where adequate in providing information.
I got good, clear communication through the course of my time in GSOC
I didn't pay much mind to emails nor the website, however, I did participate largely in MSU CS Discord servers.
N/A
N/A

Q6-EX) Please explain your answer to the communications question.

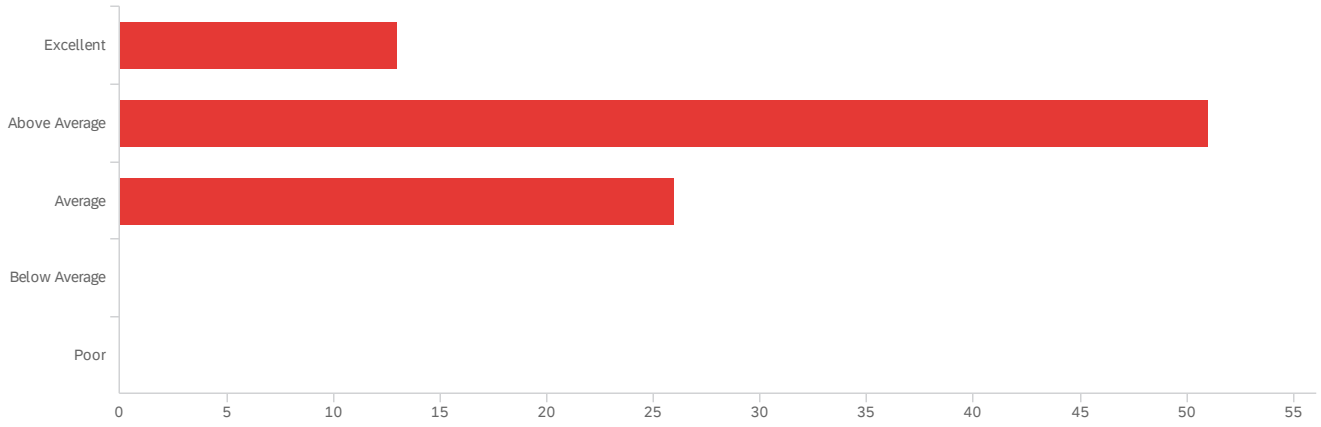
I didn't have any huge issues. Only thing of note was that the ", Your Pure Gold" emails got kinda annoying after receiving 50+ of them but I think they stopped sending them eventually.

The frequent emails about classes, clubs, and events are helpful to know.

TOO many ways to communicate.

hello

Question 7 - Q7) Rate your overall satisfaction with what you learned for your major.

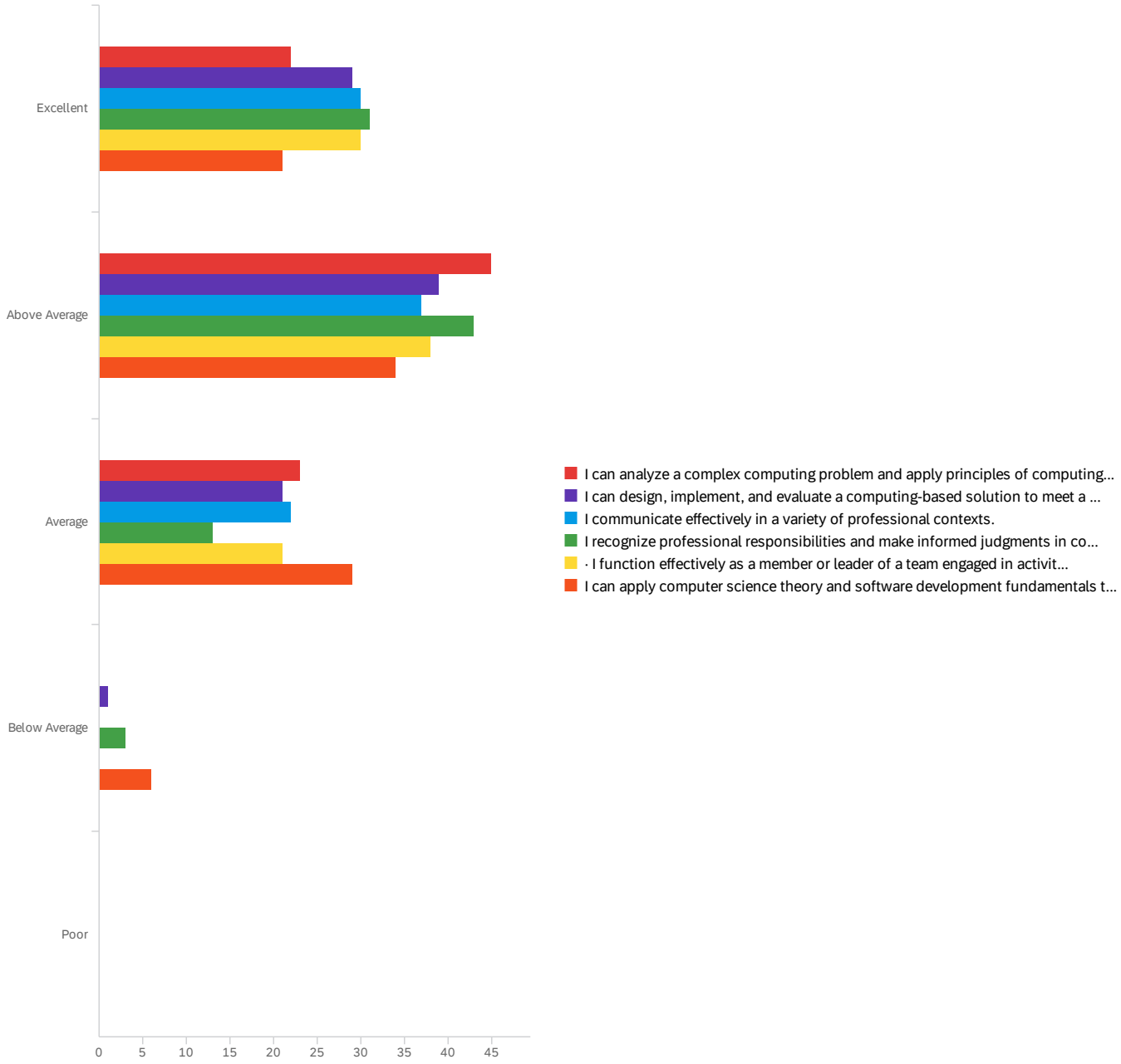


#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q7) Rate your overall satisfaction with what you learned for your major.	1.00	3.00	2.14	0.64	0.41	90

#	Field		Choice Count
1	Excellent	14.44%	13
2	Above Average	56.67%	51
3	Average	28.89%	26
4	Below Average	0.00%	0
5	Poor	0.00%	0
			90

Showing rows 1 - 6 of 6

Question 8 - Q8) Indicate your level of preparedness in regard to the following CS program. outcomes



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	I can analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.	1.00	3.00	2.01	0.71	0.50	90
2	I can design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.	1.00	4.00	1.93	0.77	0.60	90

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
3	I communicate effectively in a variety of professional contexts.	1.00	3.00	1.91	0.76	0.58	89
4	I recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	1.00	4.00	1.87	0.78	0.60	90
5	· I function effectively as a member or leader of a team engaged in activities appropriate to my major.	1.00	3.00	1.90	0.75	0.56	89
6	I can apply computer science theory and software development fundamentals to produce computing-based solutions.	1.00	4.00	2.22	0.88	0.77	90

#	Field	Excellent	Above Average	Average	Below Average	Poor	Total
1	I can analyze a complex computing problem and apply principles of computing and other relevant disciplines to identify solutions.	24.44% 22	50.00% 45	25.56% 23	0.00% 0	0.00% 0	90
2	I can design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.	32.22% 29	43.33% 39	23.33% 21	1.11% 1	0.00% 0	90
3	I communicate effectively in a variety of professional contexts.	33.71% 30	41.57% 37	24.72% 22	0.00% 0	0.00% 0	89
4	I recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	34.44% 31	47.78% 43	14.44% 13	3.33% 3	0.00% 0	90
5	· I function effectively as a member or leader of a team engaged in activities appropriate to my major.	33.71% 30	42.70% 38	23.60% 21	0.00% 0	0.00% 0	89
6	I can apply computer science theory and software development fundamentals to produce computing-based solutions.	23.33% 21	37.78% 34	32.22% 29	6.67% 6	0.00% 0	90

Showing rows 1 - 6 of 6

Question 9 - Q9) What was your favorite School of Computing experience?

Q9) What was your favorite School of Computing experience?

I enjoyed time at club meetings and other events. I enjoyed participating in a programming competition this past semester, the networking night hosted by AWC, and a few department events such as the ice-cream social. I feel they are a good place to encourage us CS majors to meet more people.

presenting a website that i made to the class. i felt quite good about it, and I got a lot of praise for my work and effort

Carson Gross' courses. His test based style of coding assignments were more effective than any other class at getting me to understand the concepts / curriculum for the course, without being needlessly overcomplicated. As well as being effective, I personally found him to be extremely knowledgeable about his class content, and in general strongly enjoyed his teaching style.

overall good

Classes with professor Gross, great asset for MSU

Learning all the necessities to be part of a multi disciplinary project.

my computer vision class. it was absolutely fantastic. It was amazing to take the principles of computer science and use them to create programs that had real results that weren't just an arbitrary assignment. I really enjoy real application of knowledge and this class was exactly that.

I found computer science theory to be very enjoyable. I have a minor in philosophy and consider myself competent in it, and this class blended philosophical thought with Computer Science. It was a lot of fun, and I often had discussions over the material with the professor, Sean Yaw.

Participating in clubs, namely AWC.

Building Robots in the Robot Vision class

Making my presentation for 476. I enjoyed doing research on a topic I found interesting and presenting it.

Meeting all the professors and learning about them, they are all great

Being a Web Design TA

CSCI-232

The kickball game and meeting all my classmates!

Learning from Carson Gross and taking all of his classes available. Carson is a super smart individual who cares about his students and their learning. Carson is an amazing asset to MSU and just an all around good guy.

Taking CSCI 366 I found to be truly compelling. If all my classes were taught that way, I think I could confidently say that I am happy with what I've learned here.

Game design class - trip to Berlin

I'd say just being a member of AWC. I really had a great time going to those meetings and being a part of that group. I'm really grateful for all of the

people that I met through that club.

I met some of my best friends of life in the early introductory classes. In general, doing challenging group projects with a group of close friends were my best memories by far.

Finishing AI.

Participating in clubs

Talking with Dr. Paxton.

Coding a big project that actually works in the end. It's so satisfying

Over all being able to use my problem solving abilitys to creat effective solutions to problems.

Learning cyber security with Reese Pearsall

The friends that I made with those in class who shared my same passion for learning.

The group projets and the relationships you get from working with people year to year.

I very much enjoyed the labs for all of Reese Pearsall's classes. They were always very clear and concise, as well as challenging enough to provide a good learning experience without making things too hard.

My favorite experience has been the classes with Carson Gross since he does a great job teaching and bringing in real world scenarios. He has prepared me the best for beginning a career as a software engineer.

Going to the Grace Hopper Conference and being involved with clubs on campus.

Cyber security. That class was solid gold. I had Reese Pearshall teaching it and he did an excellent job. By and away one of the most helpful and engaging classes I've ever taken.

Graduating.

Hunter Lloyd's lectures always put a smile on my face :) Overall, I really enjoyed getting to know the professors and experiencing many different teaching styles!

I liked taking the upper division classes that focused on cybersecurity and similar topics, like computer security, networks, operating systems, advanced software engineering, and databases.

I enjoyed taking Computer Security, Networking, Web Development, and Databases

Anything post-covid once everyone had a chance to learn how to integrate mixed and online learning, or requiring in-person with lectures hosted online to go back to

I loved every class I took with Dr. Cummings. She taught 107 which was my first computer class ever and that class got me really interested in computing.

I think my favorite School of Computing experience has been my participation in AWC.

Q9) What was your favorite School of Computing experience?

I love my experiences with the variety of assistant-teaching professors at MSU in the school of computing. The backgrounds are fun to hear about and I enjoyed learning under them, I also loved pitching ideas occasionally at the different club organizations in the college.

Having Reese Pearsall and Carson Gross for 4 of my classes was my favorite part. They made the classes enjoyable even though some of the topics were hard or boring to learn. Amazing people and professors.

My professors have probably been my favorite part of my experience. In one way or another, they have all been a joy to work with.

Getting to communicate with the intelligent staff outside of the classroom

I enjoyed writing functional programs and apps.

Making valuable connections for the future.

My favorite experience in the school of computing was the few professors who made each lecture enjoyable, mixing comedy and practical lessons into the lectures to keep me focused and fun.

Meeting all the friends I would go through classes with. Finishing out the Robot Vision final project. That class was nearly a full time job in the robot lab.

Working on the ESOF 322 final project

Meeting people with similar interests.

I had basically no computer science knowledge when I began my freshman year so it feels very rewarding now to have made it this far and learned this much.

Study Abroad in Berlin

Getting a 4.0 last semester

I liked the diversity of the teachers. I really liked and would highly recommend that teachers teach a subject for 1 year then switch instructors for that course so students who learns differently from the original instructor can have an opportunity to learn it from a different instructor.

It was really nice that professors take turns teaching classes, so that I can wait and take a class from professors I prefer.

Becoming more familiar with my professors and hearing the pieces of industry knowledge that they've passed down in their classes has been really valuable.

I can't think of anything.

User Interface Design was probably my favorite course; the freeform format let me write chiefly about game UI practices, which I am quite passionate about. It felt effortless and gave me a deeper understanding of the concepts I care about.

I got to attend the Grace Hopper Conference with AWC and it was an extremely eye-opening experience! I'm very thankful for this experience!

I can't think of any.

Learning about networks, security, compilers, web development, and databases have been my favorite computing experiences as I feel as though I

Q9) What was your favorite School of Computing experience?

have finally reached the point where I can use the skills that I have been building to create real world projects that I can use to market myself.

Taking CSCI 204 and learning how to program my own games for the first time. It was always something I wanted to learn how to do growing up, and that class gave me an opportunity to explore something I was very interested in. Even after taking CSCI 204, I still use the Unity engine and the C# programming language outside of class for personal projects and self-fulfillment.

The people are friendly and great, I love the group work and all the fun activities.

karaoke night

The challenge of AI, and winning kickball!

no

The computer vision final. It was an absolute grind and took up most of my time around finals, but had a huge payoff when our robot performed flawlessly for the demo. It was a good feeling.

Dr Cummings, Prof Gross, and Dr Stanley are the two professors that I retained information from their classes. They seem to really be invested in their students and teaching real world examples in their class. Look into their teaching methods and teach the other professors this. I understand that some background is necessary but there is a lot of information and classes that are a waste of time in the CS profession.

Finding the people that I now can call my friends and making our way through the curriculum to graduate.

Finishing my Compilers project.

The undergraduate Machine Learning and AI classes I've taken from Dr. Sheppard have been, although the most difficult, the most productive, informative, and interesting courses I've experienced here at MSU.

Any of Carson's classes.

My favorite experience was building an app as a group in ESOF 423.

My freshman year taking the first web design class. I found it fascinating that my code could create a website and I wanted to know what else I could create with coding. That was the class that made me finally decide to go into the CS Professional Degree.

Events put on by the college of engineering - dodgeball, WIE dinner.

Getting done with some of my largest projects was extremely rewarding and also relieving. I did a lot of things that I think will look great on a resume.

My favorite expirience was making friends with my peers.

The robotics classes were a bit of a mess but the topics were still fun

Being able to work with Carson. His knowledge is immense and I learned more from him then anyone else. Reese was always very helpful also.

Frankly nothing really comes to mind, While this program has been very fulfilling and a overall great experience it has also been very stressful and I am looking forward to graduation.

Reese Pearsall and Carson Gross were excellent professors.

Q9) What was your favorite School of Computing experience?

Working in the Software Engineering and Cybersecurity Lab.

Being a part of the Software Engineering and Cybersecurity Lab!

Probably the compilers course (CSCI 468) because we built a real functioning recursive decent based compiler and interpreter over the course of the semester. It felt amazingly empowering to have come full circle to understanding and implementing a new programming language our selves after first learning to use programming languages.

Probably just my first time coding in CSCI 107 my freshman year. Got me really excited about computer science and I was hooked ever since!

Summer

Question 10 - Q10) Is there anything else we should know?

Q10) Is there anything else we should know?
No
nmope
NA
No
NA
I spent the past 8 years of my life with one singular goal. this college has driven me to the edge of insanity on several occasions. I will be glad to be out.
Not that comes to mind.
~
No
NA
No
Overall my experience was great. One thing that could be improved, especially with the current job market for new grad engineers, is leveraging the schools connections with local companies to help students learn about jobs and make connections with those hiring new grads.
i started avoiding taking classes taught by lloyd after a few of them
Thanks for a great 4 years!
see Q3. This school also is in dire need of more community events for computer science students and students as a whole. I understand that part of the burden for this is on the students, but I found there to be zero fun events I could experience on campus.
Please add the names to the most and least valuable cs courses question.
Technical writing is absolutely worthless. I was supposed to learn cover letters and resumes and presenting myself to employers but instead I learned how to make a poster in photoshop (why???) and how to make a podcast in adobe audition (the fuck?? how is this helpful and how is this technical writing?)
Senior Year is too much group work
i dont understand why students had to take math classes past M172 for this degree.
Not that I can think of

Q10) Is there anything else we should know?

N/A

Not that I can think of.

N/A

Yes actually. Move everyone out of REID 102 and 202. those classrooms are abyssmal. Also, focus more on teaching practical useful things that will help people get paid and leave more of the theoretical and math heavy stuff for people who are looking for more than a batchelor's. Mandate coding security learning and make sure people understand how to write code that won't get hacked. Fix the D2l brightspace mess, and hire me to fix your website. Also, give professor Reese a raise, or some kind of reward. That guy is a gem of a teacher. And don't sleep on Carson Gross either, he is by and away your best teacher. I loved every class I took from either of those teachers, and I'm sure most other students would agree. Put some respect on their names and give them some kind of reward because those two legitimately carried this entire major. 60+% of what I learned came from their classes. I do not exaggerate when I say I owe my success in this major to those two.

Make a class on HTMX

A computer graphics course would be very nice!

Nothing comes to mind

No

I think a lot of the CS program is tailored towards people who already have a lot of experience in computing. I came from a really small town with a graduating class of 38 kids, and I didn't have the option to take any computer classes in highschool. Because of that I have felt like I have been below the average in every CS class I have taken. As early as 132 I was so lost from professors using terminology that I just had no idea what it meant. I'm in my 5th year as a CS major and I still don't think I could accurately describe what a static function is.

Nothing to Note

No

The extra required science electives feel pointless and a waste of time where I could have taken other classes.

None

NA

N/A

No

no

Aritficial Inteligence is top worst class I've ever attended. I think it could do a better job to help students at the beginning rather than leave them to learn the topic on their own.

The AI and ML classes at MSU are too demanding for undergraduates. I really wanted to get an introduction to AI and ML from Dr. Sheppard, but his course is much harder than the rest of the 3 credit CSCI courses offered at MSU.

Generally speaking, I think that Computer Science students are taught a lot about the tools available to us. However, it doesn't feel like there is enough emphasis on what real work experiences are like and how we can use what we have learned in real scenarios. Additionally, I wish there was

Q10) Is there anything else we should know?

more discussion about the many career paths available to us with the knowledge we have gained.

The grading is very poor. Most assignments feel like TA's grade for completion rather than content.

I would like to see some sort of online CS degree option in the future.

Thanks!

The grading is extremely poor most of the assignments feel as if they are graded on completion and I almost never received feedback on assignments.

Thank you for everything, and best of luck to you in the future

No

No

no

NA

Do not make CS major students take filler classes that are wasting our time and money

Nope!

There are several professors in this program who clearly do not care about the classes they are teaching, but merely tolerate these courses to be able to pursue research or other university endeavors. This is frustrating and unfair to students, and shouldn't happen.

I think Fasy is a waste of university money and should be fired.

The Career Fair is a not good for CS. There are so many students and so few opportunities.

The professors and staff at this school are remarkable. Thank you!

For Q8, the majority of questions I was able to select "excellent" for comes from being a forward individual capable of professional conversation and reasonable decision making - not from what I learned in my classes.

No.

Top favorite professors that made my progress in this major more enjoyable include Clemente Izuerta, Carson Gross, Reese Pearsall, and Mary Ann Cummings

Squirrels can fall from any height without being hurt because they can spread their body out and make their terminal velocity relatively slow

nope

nope

N/A

Q10) Is there anything else we should know?

N/A

Students tend to like lots of practical learning rather than theoretical. It is easier to understand and also provides opportunities for learning by example rather than trying to wrap your head around a theoretical concept. Some classes were a little too theoretical, so it was difficult to fully grasp concept s

Parking is terrible

End of Report