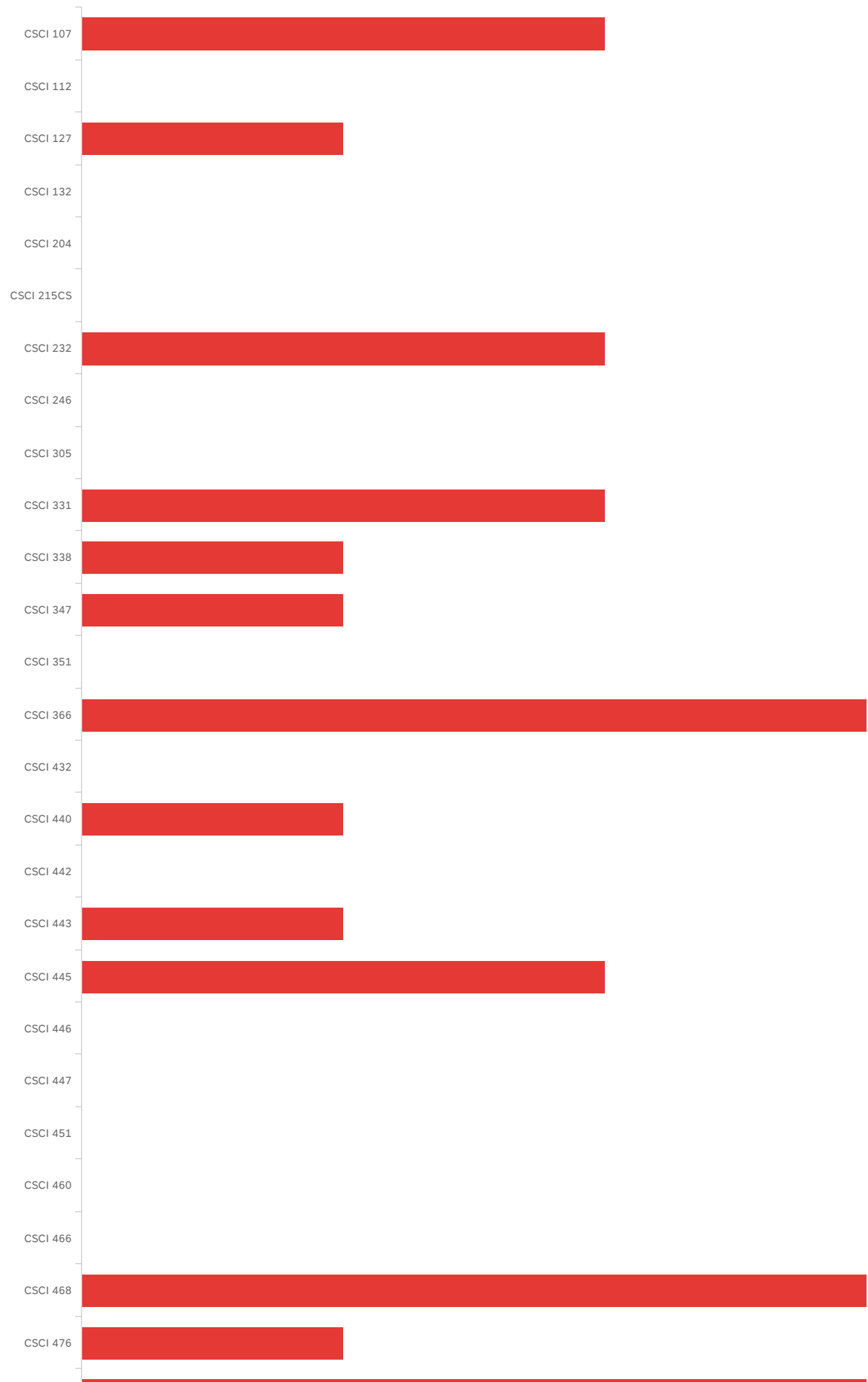


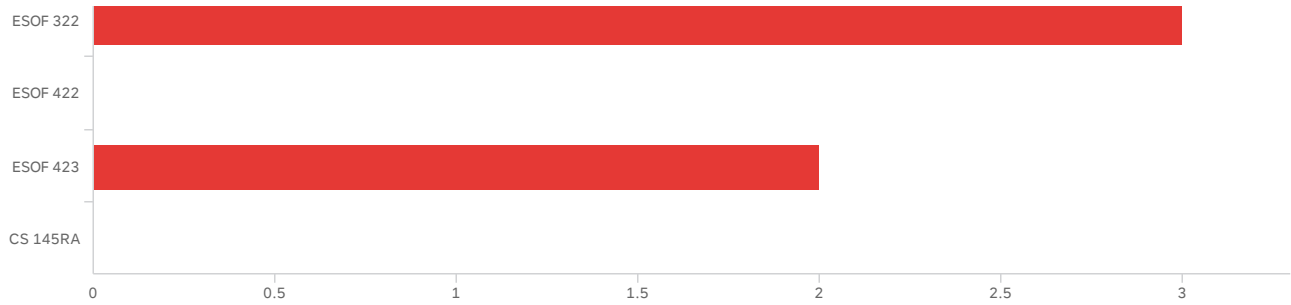
Default Report

AY24 CS-BA Senior Survey

April 15, 2024 11:24 AM MDT

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





#	Field	Choice Count
1	CSCI 107	8.00% 2
2	CSCI 112	0.00% 0
3	CSCI 127	4.00% 1
4	CSCI 132	0.00% 0
5	CSCI 204	0.00% 0
6	CSCI 215CS	0.00% 0
7	CSCI 232	8.00% 2
8	CSCI 246	0.00% 0
9	CSCI 305	0.00% 0
10	CSCI 331	8.00% 2
11	CSCI 338	4.00% 1
12	CSCI 347	4.00% 1
13	CSCI 351	0.00% 0
14	CSCI 366	12.00% 3
15	CSCI 432	0.00% 0
16	CSCI 440	4.00% 1
17	CSCI 442	0.00% 0
18	CSCI 443	4.00% 1
19	CSCI 445	8.00% 2
20	CSCI 446	0.00% 0
21	CSCI 447	0.00% 0
22	CSCI 451	0.00% 0
23	CSCI 460	0.00% 0

#	Field	Choice Count
24	CSCI 466	0.00% 0
25	CSCI 468	12.00% 3
26	CSCI 476	4.00% 1
27	ESOF 322	12.00% 3
28	ESOF 422	0.00% 0
29	ESOF 423	8.00% 2
30	CS 145RA	0.00% 0

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

Joy and beauty made me curious about programming and computer science. It's what made me add on the BA. ESOF 423 has been very valuable in learning how to work with a team and figure out real world software problems.

Software Engineering (ESOF 322) introduced me to the Agile software development process, Web Development (CSCI 331) taught me about various web technologies used in web development, and Human Computer Interaction (CSCI 445) taught me about designing user interfaces/interactions that are effective and pleasant for the user.

These three I found most valuable because of their practicality and the way they were taught. All three were project-based and with an emphasis on learning the material but also how it relates to real-world applications. I thought 331 was very valuable because of the vast range of technologies we were introduced to and again, the vast application of all the technologies/frameworks we were introduced to such as APIs, JavaScript, React, Node, MySQL, etc... very helpful class. 366 was super useful as it gave me a very holistic view of how computers work and where I fit in as a Software Engineer. It was also very helpful because of the emphasis on git, and I learned so much from binary to cloud computing - huge array of topics covered. ESOF 423 was helpful because it was the most practical class in terms of what I want to do when I graduate, I learned how to use git even more proficiently and how to make pull requests, deal with people breaking code, and then lastly, how to take an idea and turn it into a working software product that we can actually release to clients.

I found that these 3 courses, Systems Design, Databases, and Compilers all had interesting and informative lectures but on top of the content being worthwhile the projects and homework in these courses was challenging but highly practical. Each one required writing a much more substantial amount of code than most any other courses I took in the GSOC. They also all had assignments that exercised coding, planning, testing, and other skills while still applying very directly to the course content covered in lectures. I also felt that each of these courses gave me more "real-world" coding skills than any others I took at GSOC.

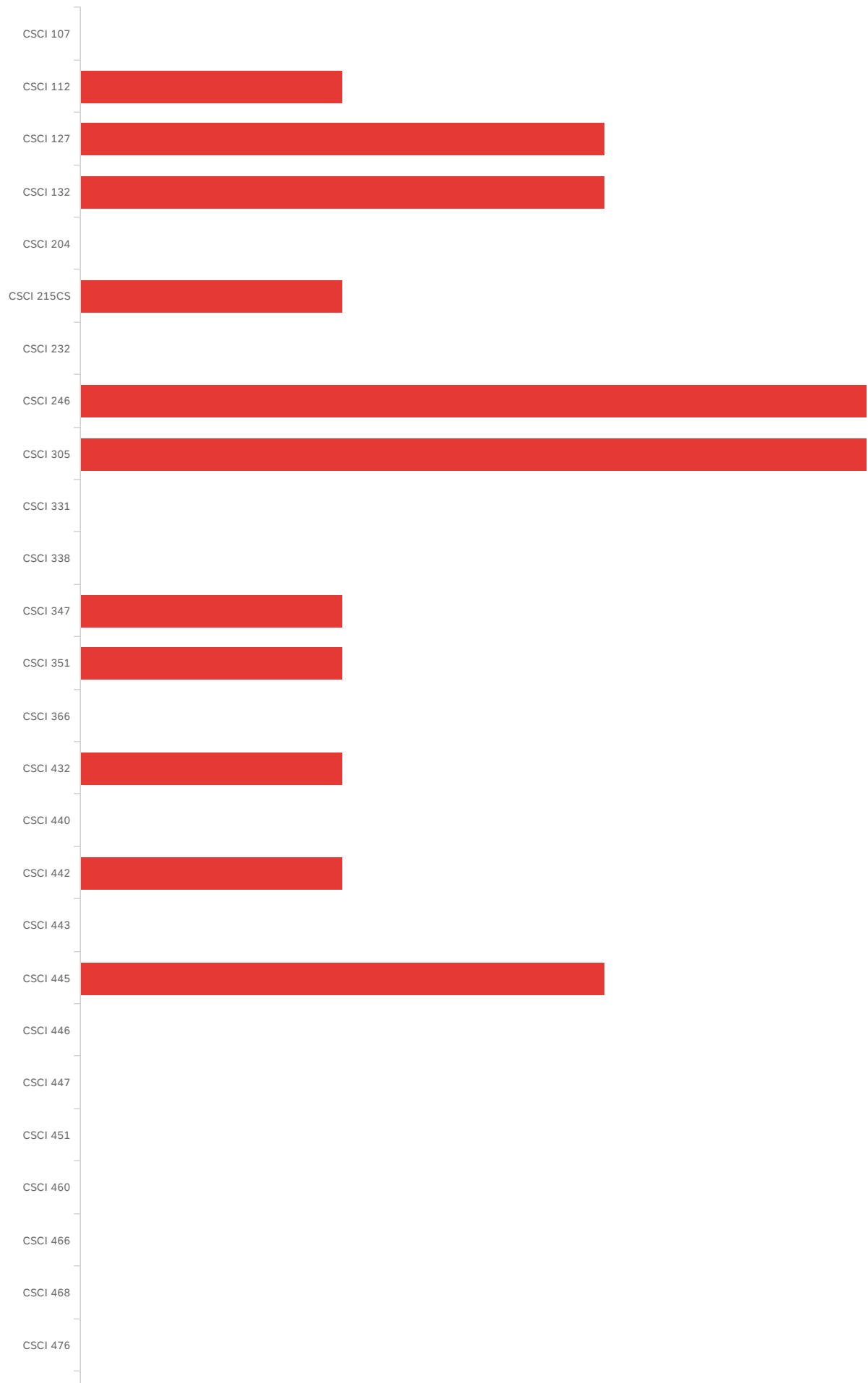
232 was super valuable in creating a solid foundation in Data Structures and Algorithms. Maryann taught this class, it was very challenging, but I learned so much and had to work really hard. Recently, I started as a systems intern at Wealthvest ESOF 322. I found my prior knowledge from ESOF 322 to be super useful. CSCI 476 was also very insightful to me because cyber security is a constant threat today, and being aware of different attacks and how to combat them seems as if it will be super useful information.

CSCI 107 - Before starting the program I had never interacted with code before. I liked the pace of this class and how it introduced coding. It was a great foundation to work with moving forward in the program. CSCI 443 - I knew when I started at MSU that I wanted to pursue a career in UX. I liked the style that Dr. Stanley used for this course, and I enjoyed the projects and course content. ESOF 322 - I felt like this class was nice to take at the same time as starting my internship. It was introducing topics and patterns that we were using at the workplace so I felt like I was getting a good grip on the information.

338 with Sean was a very valuable class as a computer science student because of Sean's teaching style as well as the concepts introduced in the class. Doing complex CS related proofs has helped me in my AI class this semester. 366 was also very helpful in understanding the very basics of how a computer operates, and I feel it would be even more valuable if taken earlier in my CS studies. 468 was great at setting due-dates and outlining work needing to be done, as well as using git, which are all very important in the industry. I found that class helped prepare me for my internship this Summer 2023.

CSCI 232 taught me about how to understand complex algorithmic calculations and apply those to programming when I created a GPS using Dijkstra's algorithm. CSCI 347 showed me how to understand the ability and importance of gathering data through coding in a clear concise manner and to understand and apply that data to a chart. CSCI 468 show me how programming languages are created and given logic to them. This also includes them making built-in algorithms.

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





#	Field	Choice Count
1	CSCI 107	0.00% 0
2	CSCI 112	5.56% 1
3	CSCI 127	11.11% 2
4	CSCI 132	11.11% 2
5	CSCI 204	0.00% 0
6	CSCI 215CS	5.56% 1
7	CSCI 232	0.00% 0
8	CSCI 246	16.67% 3
9	CSCI 305	16.67% 3
10	CSCI 331	0.00% 0
11	CSCI 338	0.00% 0
12	CSCI 347	5.56% 1
13	CSCI 351	5.56% 1
14	CSCI 366	0.00% 0
15	CSCI 432	5.56% 1
16	CSCI 440	0.00% 0
17	CSCI 442	5.56% 1
18	CSCI 443	0.00% 0
19	CSCI 445	11.11% 2
20	CSCI 446	0.00% 0
21	CSCI 447	0.00% 0
22	CSCI 451	0.00% 0
23	CSCI 460	0.00% 0

#	Field	Choice Count
24	CSCI 466	0.00% 0
25	CSCI 468	0.00% 0
26	CSCI 476	0.00% 0
27	ESOF 322	0.00% 0
28	ESOF 422	0.00% 0
29	ESOF 423	0.00% 0
30	CS 145RA	0.00% 0

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

These classes didn't catch my attention or make me learn more about the subject.

This course introduced me to a variety of languages and topics which I believe I will not need to know for the future.

The three courses I found least valuable were all courses that in hindsight were important but they were not taught well at all when I was in them. I had a really hard time learning the concepts and the professors were not forgiving or helpful at all. Those three should've been most valuable or some of the most valuable in terms of topics covered and things that we as software engineers need to know, and for some reason, I wasn't really taught the material and was never told as to why the things being covered were useful. I had to watch a bunch of extra supplemental material just to understand the concepts better, and I still feel like I don't know those topics very well, even after being out of those classes for a couple years.

Even though I'm marking these as my least valuable I still don't feel that any of these courses were a waste of time or not worth having taken. My main complaint about these three courses was that I felt that their content and curriculum could have been structured better and that they could have been more valuable if the standards and expectations of these courses was higher. 305, 215, and 132 all had the unifying characteristic of very quickly skimming over their content in a way that felt too shallow, even unnecessarily so.

This class was super basic and a nice introductory, but I have not thought about the skills since then.

I honestly found all the classes that I took to be valuable. I went through this program pretty quickly, so I felt like I had a narrow focus that I was able to stick to and each class was necessary.

246: I learned almost nothing in this class. Assignments felt like busy-work and the idea of proving statements was underexplained, especially being my first class where I needed to provide proofs for work. 305: I felt the introduction of outdated, unused languages was unnecessary and did not further my understanding of CS. Learning a language for one week, writing one small program in it, and moving on was not an effective learning strategy for me. 442: Severe lack of structure in this class. Lloyd's attitude seemed to be "Here's the lab for the week, go figure it out". Leaving CS students with drills/ hardware to assemble on their own (bad idea). I feel this class had lots of potential, but was very poorly executed.

CSCI 347 didn't really teach me much about calculating algorithms and their runtimes as most of that logic is something that can be interpreted through the language itself quite easily. CSCI 351 wasn't so much lacking in value as it was something I still don't feel confident in as I should about the stuff it was teaching me. CSCI 432 is essentially the same problem as 347 as a majority of the work seemed overly complicated for something that can be quite simple.

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

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

I think It would be fun and draw a lot of students to the the program if there was a 100 level into class that did creative coding with a tool like p5 js.

It may be valuable to have a small section of a 100 level course cover the importance of an internship as well as how to go about finding and selecting an internship.

I think CSCI 112 and CSCI 366 should be mandatory course requirements for all three comp sci majors, not just the BS majors. I'm certainly glad I took them as electives but it makes so much sense that they are required for the BS but it doesn't make any sense that they're not required for the BA. I learned so much in both classes and my programming skills went way up. I also think ESOF 423 should be required for all majors not just the BA, it was one of the most useful classes I've taken since I want to be a Software Engineer, and most of my peers across all the different CS majors want to be Software Engineers as well, I think that would be really helpful. Either that or the dept. should consider making Software Engineering a new degree offering.

Not that I can really think of. I wish that I could have taken more courses at the GSOC, there were so many that I missed out on, but when I look at the curriculum there doesn't appear to be any major holes. I would have liked to take a class specifically for Natural Language Processing or other "Soft Computing" problems related to language as it is an interest of mine.

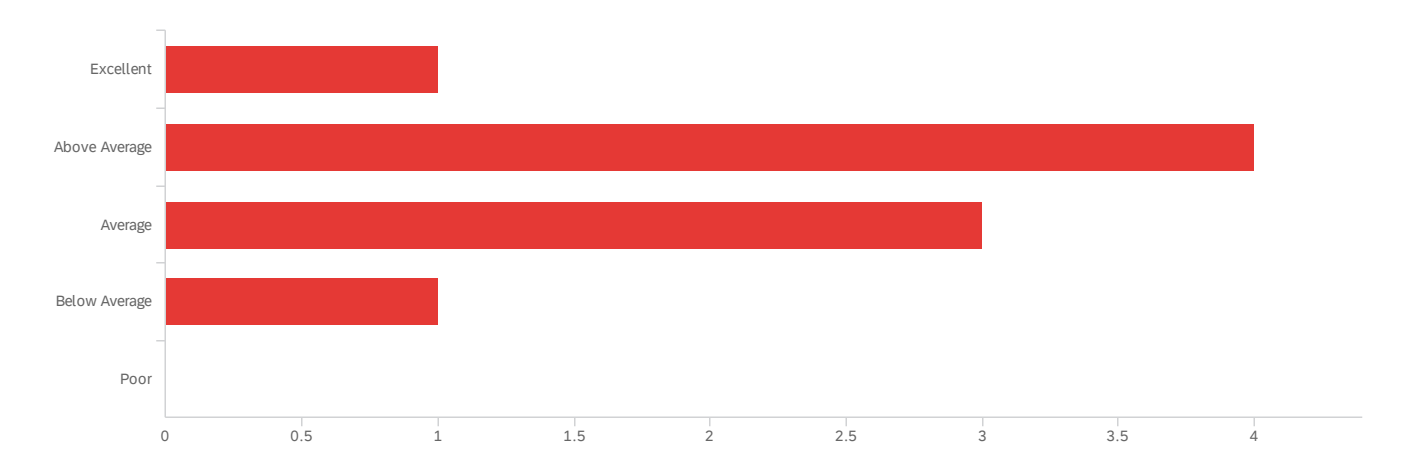
I think it was completely encapsulating.

Not that I can think of.

I believe Software Engineering could really benefit in a deep-dive GIT lesson. I felt the scrum and development processes introduced in that class were helpful for me in the industry, but my lack of git knowledge held me back for the first bit of my internship. ESOF seems like a fitting class to cover these topics.

N/A

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	4.00	2.44	0.83	0.69	9

#	Field	Choice Count
1	Excellent	11.11% 1
2	Above Average	44.44% 4
3	Average	33.33% 3
4	Below Average	11.11% 1
5	Poor	0.00% 0
		9

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

I was in a confusing place taking two majors and all my questions have been answered.

I did not interact with my advisor very often, which was my own choice, but when I did they were very helpful. The advising was perfect for my college experience.

Since I am a Business student first, I didn't really have any advising experience within the college of engineering or CS department. I was very impressed with some of my professors however, they were very helpful in terms of giving great elective suggestions but since I was a BA Computer Science major, most of my advising came from the college of business which, in large, was a garbage experience, however, no one in the CS dept. has any control over the college of business.

I usually felt very adrift when I sought advising. A few times throughout my time here, I went to faculty, and in particular my advisor, because I was having doubts about the value of what I was studying, and wanted to ask some fairly broad questions regarding what was the best path forward to pursue my interests in computing, and where I might look/search to try to answer these big questions and I usually found that faculty either didn't seem to understand what I was asking or they didn't seem able/willing to offer any real advice for what I might do about it. In addition I usually found that the advising process remained a complex mystery until the end of my time here. I slowly learned more about how it worked but I made many mistakes when signing up for classes, fulfilling requirements, etc. that meetings with advisors never seemed to catch before they became a lot of extra work and a few bad headaches worth of worrying to solve. I also felt like my advisor never really got to know me, and when I went to her seeking advice that pertained to careers, graduate school, etc outside of the world of MSU she didn't seem to be able to offer even the most vague advice or direction, much less really engage with me and work through what I was asking for guidance on. Her expertise and even just general advice seemed to stop immediately at the boundary of the school of computing. So I was often left feeling like I didn't know who to turn to or get help from. I still feel that way to be honest. Now that I'm graduating, it doesn't feel like I've gotten any more clarity in my direction or strategy to continue to study in the field of computing, or to find work in industry, it really just feels like I'm being shunted out the door by MSU after running out of financial aid.

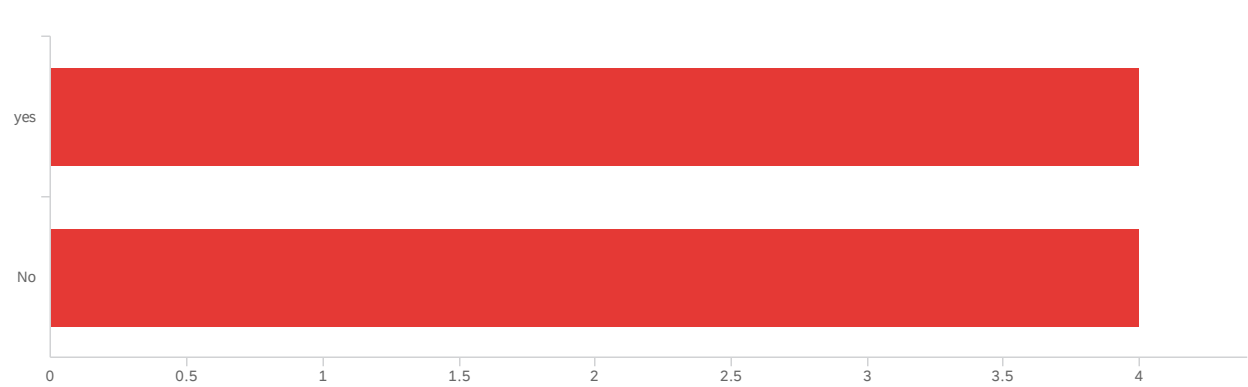
Whether it was my assigned advisor, Laura Stanely, Dr. Paxton, or anyone else in the CS department, there was always someone to answer your questions and provide you with the advising that was necessary. They always went above and beyond.

I always had good interactions with my advisors, but during my time at MSU I had three different advisors. This is no fault to the people who advised me, but it would have been nice to have only one that I could know better.

Luckily I did not need much advising from my advisor, so I cannot give much input on the experience. 95% of communication was through email regarding scheduling.

I've had two advisors throughout college and the first advisor was extremely helpful to me and provided me insight into courses that would fit my learning style and had good professors teaching them. However the second advisor had issues of not being available at times for long periods of times, and missing many of my emails or taking a long time to return any of my emails. I also didn't get much degree advice from them.

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



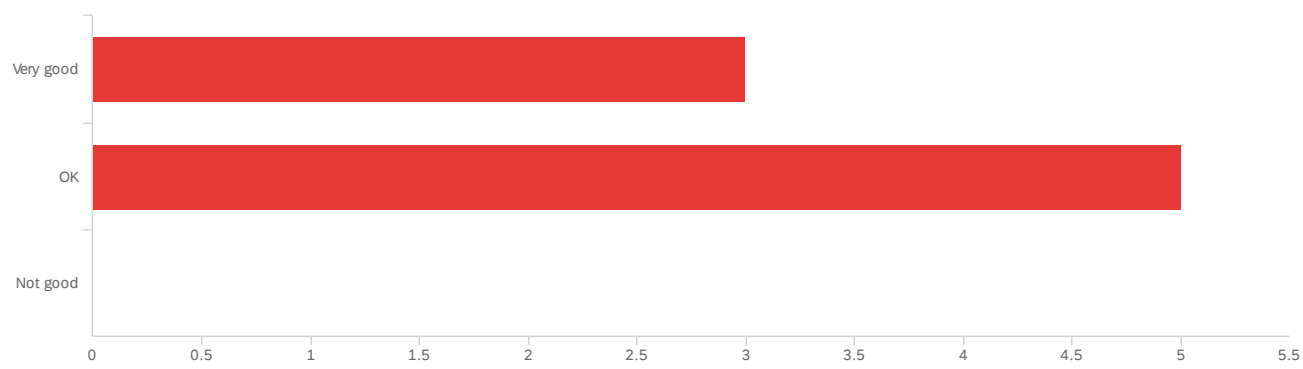
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q5) Did you participate in an internship?	1.00	2.00	1.50	0.50	0.25	8

#	Field	Choice Count
1	yes	50.00% 4
2	No	50.00% 4

8

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	2.00	1.63	0.48	0.23	8

#	Field	Choice Count
1	Very good	37.50% 3
2	OK	62.50% 5
3	Not good	0.00% 0
		8

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 thought it was fine. Not very engaging. There could be a better design to everything.

The communications I received were sparse, which I think is ideal. I appreciated that the school would mostly communicate with me when it was strictly necessary.

I feel like I regularly received emails or updates from the department regarding a plethora of different things as well as announcements were frequently made by all my professors regarding important department offerings or events.

Overall, the mailing lists, discords, communications in general were adequate. Sometimes they can feel like they are a little dispersed in a dozen different places but overall I felt like I was sort of informed about what was going on with GSOC.

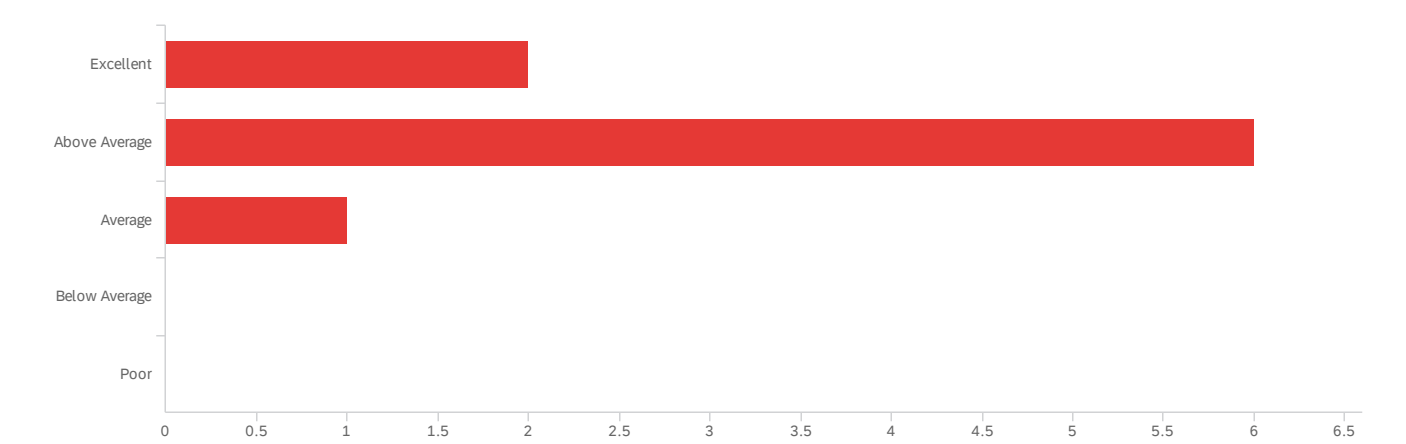
The discord was a great tool that really connected you to others in your class and allowed you to ask questions and get answers in a timely manner.

I felt that the CS communications were good, they weren't too frequent. Only the necessary or important information was being shared, which I really valued.

Discord is the most useful method of communicating for most students in this major. I found the MSU CSCI discord to be very helpful, though it is unclear to me why some professors choose to make a separate discord channel for their CSCI courses? (Daniel DeFrance)

This can go back to my previous response regarding the advisor. This issue I ran into often was that many of my emails would take several days or even a week sometimes to get a response from anyone I sent it too. This doesn't always happen but when it does it can be frustrating.

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



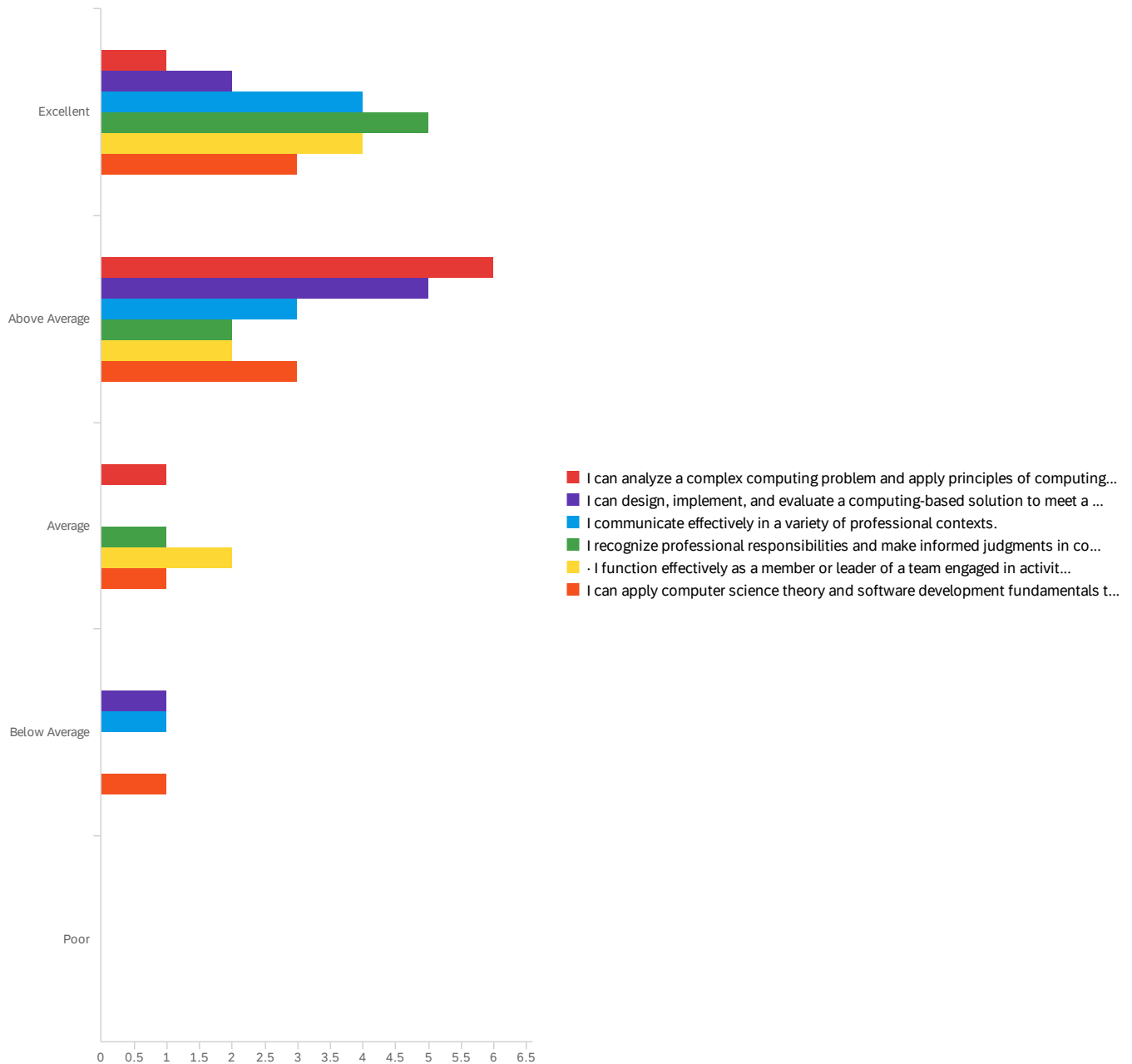
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Q7) Rate your overall satisfaction with what you learned for your major.	1.00	3.00	1.89	0.57	0.32	9

#	Field	Choice Count
1	Excellent	22.22% 2
2	Above Average	66.67% 6
3	Average	11.11% 1
4	Below Average	0.00% 0
5	Poor	0.00% 0
		9

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	2.00	0.50	0.25	8
2	I can design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.	1.00	4.00	2.00	0.87	0.75	8

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
3	I communicate effectively in a variety of professional contexts.	1.00	4.00	1.75	0.97	0.94	8
4	I recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	1.00	3.00	1.50	0.71	0.50	8
5	I function effectively as a member or leader of a team engaged in activities appropriate to my major.	1.00	3.00	1.75	0.83	0.69	8
6	I can apply computer science theory and software development fundamentals to produce computing-based solutions.	1.00	4.00	2.00	1.00	1.00	8

#	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.	12.50%	1	75.00%	6	12.50%	1	0.00%	0	0.00%	0	8
2	I can design, implement, and evaluate a computing-based solution to meet a given set of computing requirements.	25.00%	2	62.50%	5	0.00%	0	12.50%	1	0.00%	0	8
3	I communicate effectively in a variety of professional contexts.	50.00%	4	37.50%	3	0.00%	0	12.50%	1	0.00%	0	8
4	I recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.	62.50%	5	25.00%	2	12.50%	1	0.00%	0	0.00%	0	8
5	I function effectively as a member or leader of a team engaged in activities appropriate to my major.	50.00%	4	25.00%	2	25.00%	2	0.00%	0	0.00%	0	8
6	I can apply computer science theory and software development fundamentals to produce computing-based solutions.	37.50%	3	37.50%	3	12.50%	1	12.50%	1	0.00%	0	8

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 had a lot of fun in my computer vision class. Making a robot move and do things on its own was really cool.

Building a robot in Hunter Lloyd's CSCI 455 course.

Probably just some of the courses I took, I really enjoyed many of my upper division classes. I felt that I learned a lot but was also challenged academically yet not impossibly, that was quite fun. I also feel like I really experienced some breakthrough in terms of my programming abilities when I was a junior after I took 232 with some of my upper division courses and with 112. I felt that I could finally complete assignments on my own and the TA was just there to answer my clarifying questions instead of doing the whole assignment for me while I just watched. That was really rewarding and I really started to enjoy my classes after that. They became a fun puzzle I got to figure out. Also during my junior year, because it was so rewarding, I really developed a love for learning new things which was especially engaging and all I wanted to do was soak up new information in all the classes I took. So to summarize, my favorite thing was probably just finally experiencing some breakthrough in my skills and ability to translate ideas into code which then gave me a love for learning all things new in CS.

I enjoyed AWC's meetings where we just relaxed and chatted. I never had many friends in the school of computing and usually felt quite isolated from the other students in my CS classes. AWC was one of the only places I felt I ever really got to know a few people in the school of computing and to make preliminary bonds of friendship other CS students.

The women in computing events.

I think my favorite experience was creating friendships with my peers in the program.

Sean's classes were by far the most intriguing for me, and I was constantly excited to attend his classes. Thanks Sean!

My favorite was definitely working in multi-media using the Unity engine. I was able to flex creative muscles more than any other course and was able to put myself into my programming more actively with that course.

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

Q10) Is there anything else we should know?

no

Some of the computer science instructors may benefit from continuing education requirements concerning public speaking and lecture techniques.

Make sure that the professors who teach all the 100 and 200 level classes really want to teach them or are just good professors.

Nothing else to report.

No

EGEN 310R needs a significant rework or to be dropped

N/A

End of Report