



ICSE MET 2016 PANEL

Identification of Metamorphic Relations

INTRODUCTION

- Success of MT
 - Oracle problem
 - Widely adopted
 - Multiple domains, but
- Identification of sufficient Metamorphic Relations for new problem set can be tough!

PANEL STRUCTURE

- Briefly introduce the panel and panelists.
- For each panelist,
 - I will introduce panelist's bio
 - Panelist will present their perspective on the topic (~10 minutes)
 - Audience: 1-2 brief questions for the presenting panelist
 - Hold most questions to the end
- After all panelists have presented, I will open the floor to the audience to ask questions of the panel

THE QUESTION AT HAND

Identification of Metamorphic Relations

- What factors are involved with identifying metamorphic relations (MR)?
- What suggestions can you provide on MR selection?
- Is there a MR selection process?
- What challenges are there to [the] MR selection [process]?
- How does one evaluate the effectiveness of a MR?
- What test techniques have been found to be complimentary (in addition to) metamorphic testing?
- What are the new areas of MR application, development, research?

OUR PANELISTS

- Professor TY Chen
- Professor Dan Hao
- Sergio Segura, PhD

T.Y. CHEN

- Tsong Yueh Chen obtained his BSc and MPhil from The University of Hong Kong, MSc and DIC from Imperial College of The London University, and PhD from The University of Melbourne.
- He is currently a Professor of Software Engineering at Swinburne University of Technology, Australia. Prior to joining Swinburne, he taught at The University of Hong Kong and The University of Melbourne.
- His main research interest is software testing, fault localization, and program repair. He has proposed the techniques of adaptive random testing and metamorphic testing.

DAN HAO

- Dan Hao is an associate professor at the School of Electronics Engineering and Computer Science, Peking University.
- She received the BS degree in computer science from the Harbin Institute of Technology in 2002 and the PhD degree in computer science from Peking University in 2008.
- Her current work mainly focuses on software testing, especially test oracle generation, mutation testing, and regression testing.
- She was the program co-chair of AST 2015, program committee member of international conferences like APSEC 2016, SCAM 2015-2016, and FSE 2014 (demo track).
- She is a Senior Member of ACM and has been awarded the Excellent Young Scholar by the National Natural Science Foundation of China.

SERGIO SEGURA

- Sergio Segura received his Ph.D. in Software Engineering (with honours) from Seville University, where he currently works as a Senior Lecturer.
- His research interests include software testing, software variability and search-based software engineering.
- He has co-authored some highly cited papers as well as tools used by universities and companies in more than 20 countries.
- He also serves regularly as a reviewer for international journals and conferences.

Q&A