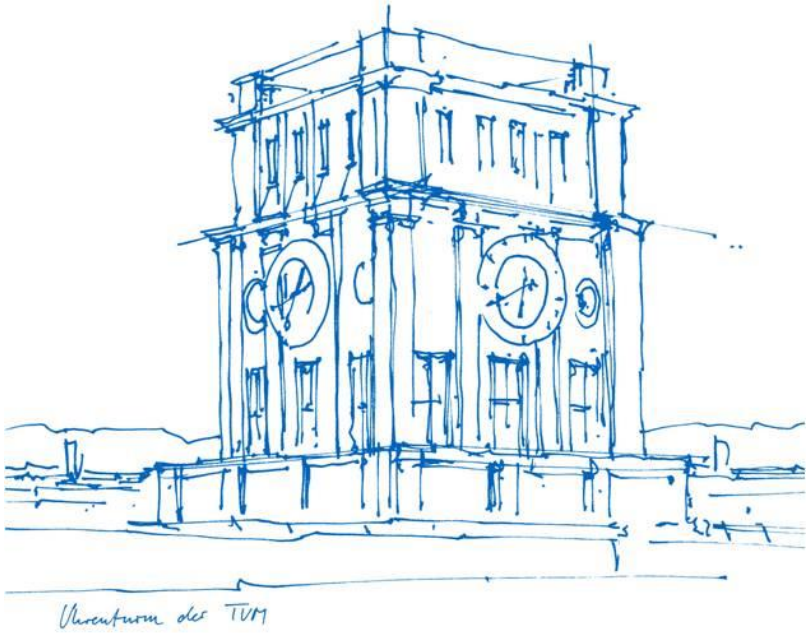
Seminar (IN0014)

Exploratory Software Testing

Pre-meeting



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Software Engineering & AI

13 Feb 2024

Agenda

- Self-introduction
- About Seminar
- Grading
- Q&A

Education Background

Technische Universität München

Post-doc working with Prof. Chunyang Chen
for Software Engineering & AI
in Department of Computer Science

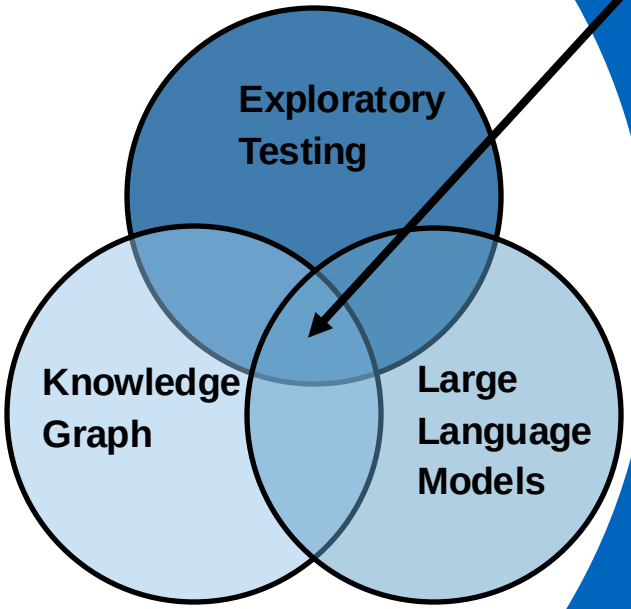
Ph.D. working with Prof. Zhenchang Xing
in School of Computing
The Australia National University, Australia

Bachelor and Master working with Prof. Yu Zhou
In Department of Computer Science and Technology
Nanjing University of Aeronautics and Astronautics, China

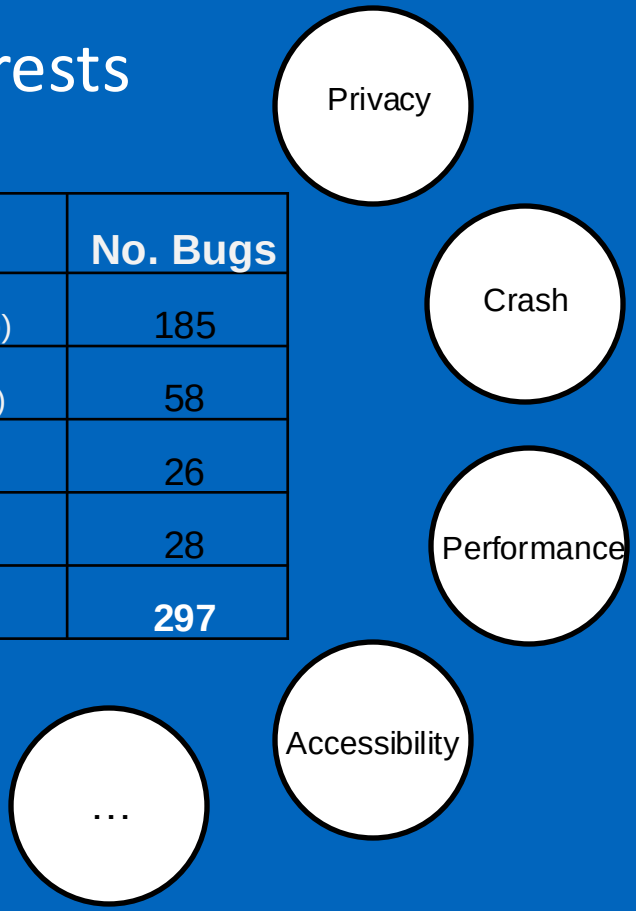
Research Interests

Education Background

Research Interests



App	No. Bugs
Firefox Browser (Desktop)	185
Firefox Browser (Android)	58
WordPress (Android)	26
AntennaPod (Android)	28
Total	**297**



About Seminar

This seminar offers an opportunity to learn about **Exploratory Testing (ET)**, a widely used and effective approach in the software industry.

You are encouraged to attend if:

- You are interested in uncovering real-world software defects.
- You want to learn about the latest research and cutting-edge techniques in testing, like leveraging LLMs to automate testing processes.

About Seminar - Info

Maximum Capacity: 15

Lecture Date: Monday, 9:15 AM – 10:45 AM

Presentation Date: Last two sessions

Presentation Time: 7 minutes for the presentation + 3 minutes for Q&A

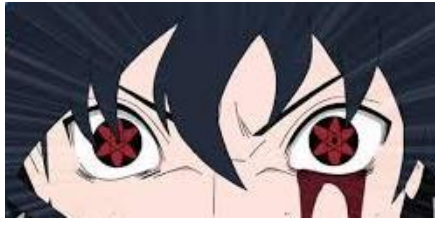
Priority Applications: Please email yanqi.su@tum.de

About Seminar - Objectives

At the end of the course, students will be able to:

- Understand the significance of diverse testing techniques.
- Understand the core principles and methodologies of Exploratory Testing (ET).
- Comprehend the integration of Large Language Models (LLMs) in automating and enhancing ET processes.
- Critically evaluate research papers, demonstrating an understanding of their implications for software testing practices.
- Develop skills in scientific writing and peer review through the preparation of a publication-style report and feedback on classmates' work.
- Present their findings effectively in a simulated scientific workshop, demonstrating research, analytical, and presentation skills.

No bug can escape my watchful eyes!!!



About Seminar - Requirements

Students are required to:

- write a report in the form of review/survey papers up to 8 page s to demonstrate their understanding of a specific research question
- participate in peer review
- present their report at the end of the module

The project will be either individual or by a group of two, depending on the enrollment situation.

Continuous Assessment:

Report: comprehensively read a research paper, gain an in-depth understanding of the research question, and learn scientific writing and typesetting (e.g., Latex).

Peer review: criticize/appreciate from the scientific perspective, and to expand your knowledge about the other topics.

Presentation: give an academic talk.

About Seminar - Grading

Continuous commitment and paper submission (45%)

This seminar requests students to put persistent effort to some extent to comprehensively understand the research question(s), although it is not designed as a research-intensive course and it does not aim to bring too much burden to the students.

Grading criteria as listed below:

- An in-depth understanding of the assigned topic and paper
- Scientific writing skills demonstrated in the paper
- (Last but not least) In compliance with the paper submission guidelines, your report must not exceed 8 pages (reference & appendix not counted) and must be in the given template.

About Seminar - Grading

Peer review participation (20%)

As students would put most efforts into a specific area, this peer review process aims to involve all students in appreciating and criticizing their peers' submissions, and meanwhile, gain some exposure to diverse topics of software testing.

The grading of this part will be based on:

- The quality of review comments (in terms of appreciation and critique)
- Timeliness of the peer review contribution, i.e., your review comments must be submitted before the deadline (to be announced)

About Seminar - Grading

Presentation in a mock conference (35%)

The presentation at the end of the seminar aims to evaluate student's understanding of the chosen topic, and to train the students' skills in scientific communication. Students are requested to present a scientific research work to people without specific expertise.

The grading of this part will be based on:

- Presentation skills (speech, quality of slides, visualization, or other technique to support delivery, etc)
- Q&A participation

Q & A