

# Zhiyu Fan

Ph.D Candidate @ National University of Singapore

Email: zhiyufan@comp.nus.edu.sg

Address: 15 Computing Drive, Singapore

Webpage: <https://zhiyufan.github.io>

## Education

- **National University of Singapore** Singapore  
Ph.D Candidate., School of Computing 2019.08 – present  
Advisor: *Abhik Roychoudhury, Shin Hwei Tan*
- **Southern University of Science and Technology** ShenZhen, China  
B.E., Computer Science and Engineering 2015.09 – 2019.07  
Advisor: *Shin Hwei Tan*

## Publications(\* Co-first author)

- **ITS: Experience of Linking Software Engineering and Programming Teaching** arXiv'preprint  
Zhiyu Fan, Yannic Noller, Ashish Dandekar, Abhik Roychoudhury  
arXiv preprint, 2023
- **Concept-based Automated Grading of CS-1 Programming Assignments** ISSTA'2023  
Zhiyu Fan, Shin Hwei Tan, Abhik Roychoudhury  
International Symposium on Software Testing and Analysis (ISSTA), 2023
- **Automated Repair of Programs from Large Language Models** ICSE'2023  
Zhiyu Fan, Xiang Gao, Martin Mirchev, Abhik Roychoudhury, Shin Hwei Tan  
IEEE/ACM 45th International Conference on Software Engineering (ICSE), 2023
- **Verifix: Verified Repair of Programming Assignments** TOSEM'2022  
Umair Z. Ahmed\*, Zhiyu Fan\*, Jooyong Yi, Omar I. Al-Bataineh, Abhik Roychoudhury  
Transactions on Software Engineering and Methodology (TOSEM), 2022
- **A systematic evaluation of problematic tests generated by EvoSuite.** ICSE'2019  
Zhiyu Fan  
ACM Student Research Competition @ ICSE, 2019

## Services

- Reviewer for SIGCSE 2024
- Reviewer for TSE 2023

## Work Experience

- **Southern University of Science and Technology** Shenzhen, China  
*Research Assistant* 2019.06 – 2019.08

## Awards and Honors

- **NUS Research Achievement Award** 2023.01
- **NUS Research Scholarship** 2019.08 – Present
- **Bronze Medal in ACM Student Research Competition** *ICSE 2019, ACM* 2019.06

- **Outstanding Graduate Thesis Award of SUSTech** 2019.06
- **Outstanding Graduate of SUSTech** 2019.05
- **ACM SIGSOFT CAPS Grants** *ICSE 2019* 2019.04
- **ACM SIGSOFT SRC Travel Award** *ICSE 2019* 2019.03
- **National Student Contest of Software Testing** *First Prize* 2018.11

## Teaching experience

- **CS3213: Foundations of Software Engineering** National University of Singapore  
Head Teaching Assistant 2023.01 – 2023.04
- **CS3213: Foundations of Software Engineering** National University of Singapore  
Teaching Assistant 2022.01 – 2022.04
- **CS4211: Formal Method for Software Engineering** National University of Singapore  
Teaching Assistant 2020.08 – 2020.11
- **CS304: Software Engineering** Southern University of Science and Technology  
Teaching Assistant 2019.03 – 2019.06
- **CS303A: Introduction to Artificial Intelligence** Southern University of Science and Technology  
Teaching Assistant 2019.03 – 2019.06
- **CS102A: Java How to program** Southern University of Science and Technology  
Teaching Assistant 2016.09 – 2017.01