

# Yuntong Zhang

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CONTACT INFORMATION	PLSE Lab (COM3 02-20) School of Computing National University of Singapore	<i>E-mail:</i> yuntong@comp.nus.edu.sg <i>WWW:</i> <a href="https://yuntongzhang.github.io/">https://yuntongzhang.github.io/</a>
RESEARCH INTERESTS	automatic programming, program repair, program analysis, software security, software testing	
EDUCATION	<b>National University of Singapore</b> , Singapore Ph.D. Candidate, Computer Science, August 2021 - present <ul style="list-style-type: none"><li>• Topic: Role of Specification in Automatic Programming</li><li>• Advisor: Prof. Abhik Roychoudhury</li></ul> Bachelor of Computing in Computer Science, 2017-2021 <ul style="list-style-type: none"><li>• GPA: 4.9/5.0</li><li>• Dean's List (AY2018/2019 Sem1, AY2019/2020 Sem2, AY2020/2021 Sem1).</li></ul>	
PUBLICATIONS	<b>SpecRover: Code Intent Extraction via LLMs.</b> [link] <b>ICSE'25</b> Haifeng Ruan*, <u>Yuntong Zhang</u> *, Abhik Roychoudhury. (*Joint first authors ordered alphabetically) 47th International Conference on Software Engineering (ICSE). 2025.  <b>EffFix: Efficient and Effective Repair of Pointer Manipulating Programs.</b> [link] <b>TOSEM'25</b> <u>Yuntong Zhang</u> , Andreea Costea, Ridwan Shariffdeen, Davin McCall, Abhik Roychoudhury. ACM Transactions on Software Engineering and Methodology (TOSEM). 2025.  <b>AutoCodeRover: Autonomous Program Improvement.</b> [link] <b>ISSTA'24</b> <u>Yuntong Zhang</u> , Haifeng Ruan, Zhiyu Fan, and Abhik Roychoudhury. Proceedings of the 33rd ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA). 2024.  <b>Program Vulnerability Repair via Inductive Inference.</b> [link] <b>ISSTA'22</b> <u>Yuntong Zhang</u> , Xiang Gao, Gregory J. Duck, and Abhik Roychoudhury. Proceedings of the 31st ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA). 2022.  <b>Hardening Binaries against More Memory Errors.</b> [link] <b>EuroSys'22</b> Gregory J. Duck, <u>Yuntong Zhang</u> , and Roland HC Yap. Proceedings of the Seventeenth European Conference on Computer Systems (EuroSys). 2022.	
PREPRINTS	<b>Program Repair by Fuzzing over Patch and Input Space.</b> [link] <b>arXiv'23</b> <u>Yuntong Zhang</u> , Ridwan Shariffdeen, Gregory J. Duck, Jiaqi Tan, Abhik Roychoudhury.	
HONORS AND AWARDS	<b>Research Achievement Award</b> , School of Computing, NUS, AY2022/2023 Semester 1 <b>Outstanding Undergraduate Researcher Prize</b> , National University of Singapore, 2021	
TEACHING EXPERIENCE	<b>National University of Singapore</b> , Singapore <i>Teaching Assistant</i> <b>August, 2018 - May 2020</b> Prepared material and conducted tutorial/lab sessions for courses in School of Computing. <ul style="list-style-type: none"><li>• CS2040S (Data Structures and Algorithms), AY2019/2020 Semester 2</li><li>• CS2106 (Introduction to Operating Systems), AY2019/2020 Semester 2</li></ul>	

- CS1010S (Programming Methodology), AY2019/2020 Semester 1
- CS1101S (Programming Methodology), AY2018/2019 Semester 1

INDUSTRY  
EXPERIENCE

**SonarSource**, Singapore  
*AI Researcher (part-time)*  
Working on automatic programming.

**February 2025 - Now**

**Oracle Labs**, Australia (remote)  
*Research Intern*  
Program repair.

**September 2024 - December 2024**

**Sea Group (Shopee)**, Singapore  
*Software Engineering Intern*

**May 2019 - August 2019**

Worked in the back-end engineering team on server monitoring system.

**Yitu Tech**, Singapore  
*Research and Development Intern*

**December 2018 - March 2019**

Worked on the internal AI office assistant system.