Yuhao Zhang

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EDUCATION University of Wisconsin-Madison, Madison, United States

■ Pursing PhD in Computer Science

Sept. 2019 – Present

Peking University, Beijing, China

■ B.S. in Computer Science

Sept. 2015 – July 2019

RESEARCH EXPERIENCE

madPL Group, University of Wisconsin-Madison

Research Assistant

Aug. 2019 - Present

- Project: Verifying and Achieving Robustness of Neural Network Models over Sequences
- Supervisors: Prof. Loris D'Antoni and Prof. Aws Albarghouthi

System Lab, Software Engineering Institute, Peking University

■ Undergraduate Research Assistant

Mar. 2017 – July 2019

- Project: An Empirical Study on TensorFlow Program Bugs, Detecting Numerical Bugs in TensorFlow Programs
- Supervisor: Prof. Yingfei Xiong

Software Analytics Group, Microsoft Research Asia

■ Research Intern

Sept. 2018 – Mar. 2019

- Project: Ideas in Excel
- Supervisors: Lead Researcher Han Shi and Associate Researcher II Xiao Lv

Automated Software Engineering Group, University of Illinois Urbana-Champaign

■ Summer Research Intern

July 2018 – Sept. 2018

Project: Test Coverage StudySupervisors: Prof. Tao Xie

PUBLICATIONS

- Yuhao Zhang, Aws Albarghouthi, Loris D'Antoni, "Robustness to Programmable String Transformations via Augmented Abstract Training" on arXiv, Feb. 2020.
- Siwakorn Srisakaokul, Yuhao Zhang, Zexuan Zhong, Wei Yang, and Tao Xie, "MULDEF: Multi-model-based Defense Against Adversarial Examples for Neural Networks" on arXiv, Aug. 2018.
- Yuhao Zhang, Yifan Chen, Shing-Chi Cheung, Yingfei Xiong, and Lu Zhang, "An empirical study on TensorFlow program bugs" in *Proceedings of the 27th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA*, Amsterdam, The Netherlands, July 2018.

PROJECTS & EXPERIENCE

Selected Coursework Projects, School of Electronic Engineering and Computer Science (EECS) Peking University

■ Computer Network Lab, A Review Bot for Taobao

Feb. 2018 – June 2018

- A review bot for automatically generating good reviews in Taobao.
- Compiler Lab, A Safe Memory-leak Fixing For C Programs

Feb. 2017 – June 2017

- A tool for automatically detecting and fixing memory leaking in C programs.
- Software Analysis, **Parallel Detection in C for OpenACC**

Sept. 2016 - Jan. 2017

• A tool for automatically inserting OpenACC statements into C codes for parallel acceleration.

Extra Curricular Projects, Peking University

• Project: Peking University Course Scheduling System

Sept. 2017 – Mar. 2018

- To arrange the schedule for all courses in Peking University.
- Project: PKURUNNER

Apr. 2016 – Jan. 2018

• An application to record running distances of students (Thousands of students are using it).

Teaching Assistant, Peking University

Algorithm Design and Analysis

Feb. 2018 - June 2018

AWARDS &

■ Top 10 undergraduate thesis, EECS Department, Peking University

June 2019

SCHOLARSHIPS • Award of Excellence, Microsoft Research Asia

Mar. 2019

	2010
■ Suzhou Industrial Park Scholarship, Peking University	2018
■ Fourth Place, ACM-ICPC, Ho Chi Ming City Regional, Vietnam Dec. 2	2017
■ Gold, ACM-ICPC, Xian Regional, China Oct. 2	2017
■ Schlumberger Scholarship, EECS Department, Peking University	2017
■ Gold, ACM-ICPC, China-Final, China Dec. 2	2016
■ Seventh Place, ACM-ICPC, Yangon Regional, Myanmar Dec. 2	2016
■ Gold, ACM-ICPC, Dalian Regional, China Oct. 2	2016
■ iPinYou Scholarship, EECS Department, Peking University	2016
■ Gold, ACM-ICPC, Hefei Regional, China Oct. 2	2015
■ Gold, the National Olympiad of Informatics, China Aug. 2	2014