Jianping Zeng

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EDUCATION

Purdue University
West Lafayette, IN
Ph.D. in Computer Science
Aug. 2019 – Now

Virginia Tech
Blacksburg, VA
Ph.D in Computer Science; Transferred to Purdue University
Aug. 2018 – May. 2019

Huazhong University of Science and Technology
Wuhan, China
Master of Science in Computer Science; GPA: 3.7
Sept. 2014 – June. 2017

Jiaxing University
Jiaxing, China
Bachelor of Science in Computer Science; GPA: 3.7
Sept. 2010 – June. 2014

EXPERIENCE

Purdue University
West Lafayette, IN
Graduate Research Assistant
Aug 2019 - Present

Virginia Tech
Blacksburg, VA
Graduate Research Assistant
Aug 2018 - Aug 2019

Alibaba T-Head Semiconductor
Hangzhou, China
Compiler Engineer
Dec 2017 - July 2018

- **C-Sky backend of GCC/LLVM**: engaged in improving GCC backend, developing LLVM backend for C-Sky CPU, and tuning GCC/LLVM optimizations for customized C-Sky ISA/Microarchitecture.

Alibaba Taobao BU
Hangzhou, China
Advanced Software Engineer
June 2017 - Dec 2017

- **Static Program Analyzer**: Finished a static analyzer for C-family languages based on Clang 5, which is widely used for statically validating correctness and robustness of mobile Taobao (the most popular online shopping platform in China) APP with formal language.

Alibaba Group
Hangzhou, China
Software Engineer Intern
June 2016 - Aug 2016

- **Google V8 VM**: Tuned the fore-end of Google V8 virtual machine to add some functions for supporting static type annotation of JavaScript language, we named it as static-javascript.

Huazhong University of Science and Technology
Wuhan, China
Teaching Assistant
Sept 2014 - June 2015

- **TA for Compiler Course**:

PUBLICATION

- **PLDI'20**: Compiler-Directed Soft Error Resilience for Lightweight GPU Register File Protection, Hongjune Kim, **Jianping Zeng**, Qingrui Liu, Mohammad Abdel-Majeed, Jaejin Lee, Changhee Jung

PROJECTS

- **XCC Research Compiler**: Open source C/C++/Fortran Compiler written in Java for research purpose, which accepts LLVM IR as input and produce ARM/X86 assembly code. The main motivation of this project is greatly leveraging the safe programming model provided by managed language, e.g., Java, to free compiler engineer so that compiler engineer can be concentrated on problem-specific coding work instead of being distracted by other unrelevant bugs.

PROGRAMMING SKILLS

- **Languages**: C/C++, Java, Python, LLVM, ARM/X86 assembly **Technologies**: Compiler and Computer Architecture