Wei Zhang

Ph.D. Candidate at University of California, Irvine *thezhangwei@gmail.com*

Summary

Programming language enthusiast, curious engineer, self-proclaimed polyglot programmer.
Personal website: *http://thezhangwei.com/*
Bitbucket: *https://bitbucket.org/thezhangwei*
GitHub: *https://github.com/thezhangwei*

Skills

Proficient: Python, Java, C/C++, x86 Assembly, JavaScript
Used: HTML/CSS, Ruby, R, VHDL, CUDA, OpenGL, SQL, Tex, Haskell, Ada

---

Experience

Graduate Student Researcher at **UC Irvine** *09/2010 - Present*

I work on research projects related to Programming Languages, Virtual Machines and Compilers. I contribute to ZipPy, a Truffle-based Python 3 implementation.

Software Development Intern at **Oracle Labs** *09/2014 - 09/2014*

Implemented Java Native Runtime (JNR) backend for SubstrateVM (Java Virtual Machine).

Software Development Intern at **Oracle Labs** *09/2013 - 09/2013*

Implemented the SystemJava framework for SubstrateVM (Java Virtual Machine). SystemJava enabled Java as a system programming language through seamless integration with native libraries.

Customer Service Engineer at **ASML** *06/2007 - 08/2008*

ASML is a lithography tool vendor for silicon fabs. I worked as customer technical support resolving tool related process issues.

Production Engineer at **AT&S** *10/2005 - 06/2007*
Technical support for equipment related process issues. I participated in the production ramp up of AT&S' Shanghai Plant.

Projects

ZipPy at UC Irvine
A fast and lightweight Python 3 implementation built using the Truffle framework. ZipPy leverages the underlying Java JIT compiler and compiles Python programs to highly optimized machine code at runtime.

SubstrateVM at Oracle Labs
SubstrateVM (Java Virtual Machine) tries to use Graal as the LLVM for Java apps to compile hosted programs ahead-of-time. Its main goal is to embed language runtimes directly into Oracle's database.

Modular VM at UC Irvine
An extension to the Maxine VM (Java Virtual Machine) that enables deeper integrations with JVM languages like Jython (Python), Rhino (JavaScript) or JRuby (Ruby). It automatically accelerates guest language interpreters written in Java.

Education

University of California, Irvine
Ph.D., Computer Science, 2010 - 2015

Chalmers University of Technology
Master, Computer Engineering, 2008 - 2010

University of Science and Technology Beijing
Bachelor, Mechanical Engineering, 2000 - 2004