

# Xin Zhang

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## EDUCATION

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**Georgia Institute of Technology, USA**

2011 - Present

Ph.D Candidate in Computer Science. GPA: 3.9/4.0

Advisor: Mayur Naik

**Shanghai Jiaotong University, China**

2007 - 2011

B.E. in Software Engineering. GPA: 3.7/4.0

Ranked 1 out of 120

## RESEARCH INTERESTS

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I have a broad interest in programming languages and software engineering, including program analysis, program verification and program synthesis, with emphasis on large programs.

My other interests include mobile-cloud computing and approximate computing.

## PUBLICATIONS

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- Ravi Mangal, **Xin Zhang**, Aditya Kamath, Aditya Nori, and Mayur Naik. Scaling Relational Inference Using Proofs and Refutations. Conference on Artificial Intelligence (AAAI) 2016.
- **Xin Zhang**, Ravi Mangal, Mayur Naik, and Aditya Nori. Query-Guided Maximum Satisfiability. ACM Symposium on Principles of Programming Languages (POPL) 2016.
- Ravi Mangal, **Xin Zhang**, Aditya Nori and Mayur Naik. Volt: A Lazy Grounding Framework for Solving Very Large MaxSAT Instances. International Conference on Theory and Applications of Satisfiability Testing (SAT) 2015.
- Jongse Park, Hadi Esmaeilzadeh, **Xin Zhang**, Mayur Naik, and Bill Harris. FlexJava: Language Support for Safe and Modular Approximate Programming. ACM Symposium on Foundations of Software Engineering (FSE) 2015.
- Ravi Mangal, **Xin Zhang**, Mayur Naik, and Aditya Nori. A User-Guided Approach to Program Analysis. ACM Symposium on Foundations of Software Engineering (FSE) 2015. **Distinguished Paper Award.**
- **Xin Zhang**, Ravi Mangal, Radu Grigore, Mayur Naik, Hongseok Yang. On Abstraction Refinement for Program Analyses in Datalog. ACM Conference on Programming Language Design and Implementation (PLDI) 2014. **Distinguished Paper Award.**
- **Xin Zhang**, Ravi Mangal, Mayur Naik, Hongseok Yang. Hybrid Top-down and Bottom-up Interprocedural Analysis. ACM Conference on Programming Language Design and Implementation (PLDI) 2014.
- **Xin Zhang**, Mayur Naik, Hongseok Yang. Finding Optimum Abstractions in Parametric Dataflow Analysis. ACM Conference on Programming Language Design and Implementation (PLDI) 2013.
- Cheng Zhang, Juyuan Yang, Yi Zhang, Jing Fan, **Xin Zhang**, Jianjun Zhao, Peizhao Ou. Automatic Parameter Recommendation for Practical API Usage. International Conference on Software Engineering (ICSE) 2012.

## HONORS AND AWARDS

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**Facebook Fellowship**, 2015-2016.

**Distinguished Paper Award.** The 10th joint meeting of the european software engineering conference and the ACM SIGSOFT symposium on the foundations of software engineering. (8 out of 73 accepted papers)

**Distinguished Paper Award.** The 35th annual ACM SIGPLAN conference on Programming Language Design and Implementation. (3 out of 52 accepted papers)

**Finalist** for 2014 Qualcomm Innovation Fellowship. (32 out of 137)

## POSITIONS HELD

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<b>Research Intern, Microsoft Research Cambridge</b>	Summer 2013
Worked with Josh Berdine on <b>SLayer</b> , a formal verification tool for memory safety.	

## TEACHING EXPERIENCE

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<b>CS6340: Software Analysis and Testing</b> , Georgia Tech	Fall 2014
Teaching Assistant	

<b>CS4400: Introduction to Database Systems</b> , Georgia Tech	Spring 2013
Teaching Assistant	

## SKILLS

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**Programming languages:** Java, C++, C, C#, JavaScript, PHP, OCaml, Datalog.

**Tools:** IDEs (Eclipse, Visual Studio, Netbeans, Adobe Dreamweaver, Zend Studio), Program Analysis Frameworks (Chord, ASM), Formal Proof Management Systems (Coq), Program Profilers (Yourkit), Compiler Infrastructures (LLVM), Editors (VI).

**Natural languages:** Mandarin (native speaker), English (fluent).