

Kia Rahmani

PHD CANDIDATE

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Education

Purdue University

PHD IN COMPUTER SCIENCE

West Lafayette, IN, USA

2015-2022 (expected)

- **Advisors:** Dr. Suresh Jagannathan and Dr. Benjamin Delaware
- **Thesis Topic:** Static analysis of modern database-backed programs with a focus on synthesis problems

Purdue University

MS IN COMPUTER SCIENCE

West Lafayette, IN, USA

2015-2020

- **Courses:** Advanced Topics In Programming Languages, Computer-aided Program Reasoning, Programming Languages, Operating Systems, Information Security, Formal Methods In Databases, Parallel Computing, Algorithm Design and Implementation, Distributed Database Systems, Simulation And Modeling Of Computer Systems

Sharif University of Technology

BS IN COMPUTER SCIENCE

Tehran, Iran

2010-2015

Work Experience

Microsoft Corporation

RESEARCH INTERN

Redmond, WA

June 2020 - Nov 2020

- **Supervisors:** Mohammad Raza and Sumit Gulwani

Publications

(OOPSLA'21) Multi-modal Program Inference: a Marriage of Pre-trained Language Models and Component-based Synthesis

- **Kia Rahmani**, Mohammad Raza, Sumit Gulwani, Vu Le, Daniel Morris, Arjun Radhakrishna, Gustavo Soares, Ashish Tiwari

(PLDI'21) Repairing Serializability Bugs in Distributed Database Programs via Automated Schema Refactoring

- **Kia Rahmani**, Kartik Nagar, Benjamin Delaware and Suresh Jagannathan

(OOPSLA'19) CLOTHO: Directed Test Generation for Weakly Consistent Database Systems

- **Kia Rahmani**, Kartik Nagar, Benjamin Delaware and Suresh Jagannathan

(PaPoC'18) Fine-grained distributed consistency guarantees with effect orchestration

- **Kia Rahmani**, Gowtham Kaki and Suresh Jagannathan

Skills

Programming: Java, C#, Haskell, Systems/Networks

Database: Cassandra, MongoDB, CockroachDB, PostgreSQL, MySQL

Misc: Z3, Git, AWS, Coq, Jepsen, ~~LaTeX~~

Teaching Experience

Purdue University Teaching Assistant: Principles and Practices of Compilers (2018), Programming Languages (2019)

Sharif University Teaching Assistant: Mathematical Logic (2014)

Helli High School Teacher: C programming Course (2010-2013)

References

- Suresh Jagannathan** Professor, Department of Computer Science, Purdue University
Phone: 765-494-0971 - Email: suresh@cs.purdue.edu
- Benjamin Delaware** Assistant Professor, Department of Computer Science, Purdue University
Email: bendy@purdue.edu
- Sumit Gulwani** Partner Research Manager, Microsoft Corporation
Email: sumitg@microsoft.com
- Mohammad Raza** Senior Researcher, Microsoft Corporation
Email: moraza@microsoft.com