

Kia Rahmani

POSTDOCTORAL FELLOW

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Education

Purdue University

West Lafayette, IN, USA

PHD IN COMPUTER SCIENCE

2022

- **Advisors:** Suresh Jagannathan and Benjamin Delaware
- **Thesis:** Symbolic Analysis of Weak Concurrency Semantics in Modern Database Programs

Purdue University

West Lafayette, IN, USA

MS IN COMPUTER SCIENCE

2020

- **Courses:** Advanced Topics In Programming Languages, Computer-aided Program Reasoning, Verifying Systems At Scale, 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

Tehran, Iran

BS IN COMPUTER SCIENCE

2015

Work Experience

The University of Texas at Austin

Austin, TX, USA

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September 2022 - present

- **Supervisors:** Isil Dillig and Joydeep Biswas

Microsoft Corporation

Redmond, WA, USA

RESEARCH INTERN

June 2020 - Nov 2020

- **Supervisors:** Mohammad Raza and Sumit Gulwani
- **Internship Project:** Designing a new program synthesis technique backed by GPT-3

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

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
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- Sumit Gulwani** Partner Research Manager, Microsoft Corporation
Email: sumitg@microsoft.com
- Isil Dillig** Professor, The University of Texas at Austin
Email: isil@cs.utexas.edu
- Joydeep Biswas** Assistant Professor, The University of Texas at Austin
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