Liyi Li

Education University of Illinois at Urbana-Champaign

Champaign, IL

Degree: PHD, Computer Science Graduation Date: Fall 2020

University of Illinois at Urbana-Champaign

Champaign, IL

Degree: Master of Science, Computer Science

Graduation Date: Spring 2014

University of Illinois at Urbana-Champaign

Champaign, IL

Degree: Bachelor of Science, Computer Science

Graduation Date: Spring 2012

Case Western Reserve University

Cleveland, OH

Degree: Bachelor of Science, Computer Science

Spring 2009 – Spring 2010

Work Experience

Award

UMD CS Department Victor Basili Postdoc

College Park, MD May 2020 – Present

• Choose Ohio First Scholarship 2010 spring

- The Carolyn J. and John A. Massie '66 Prize 2010
- UIUC University Honor 2012 (Bronze Tablet)
- 2019 Spring Outstanding Teaching Assistant Award

Publication and Conference

- Liyi Li, Elsa L. Gunter, William Mansky. Symbolic Analysis Tools for CSP, ICTAC 2014.
- Liyi Li and Elsa L. Gunter, A method to translate order-sorted algebras to many-sorted algebras, WPTE 2017.
- Liyi Li and Elsa L. Gunter, IsaK-Static: A Complete Static Semantics of K, FACS 2018
- Liyi Li and Elsa L. Gunter, K-LLVM: A Relatively Complete Semantics of LLVM IR, ECOOP 2020
- Livi Li and Elsa L. Gunter, Per-Location Simulation, NFM 2020
- Liyi Li and Elsa L. Gunter, A Complete Semantics of K and Its Translation to

- Isabelle, ICTAC 2021
- Kesha Hietala, Robert Rand, Shih-Han Hung, Liyi Li, Michael Hicks, Proving Quantum Programs Correct, ITP 2021
- Kesha Hietala, Liyi Li, Akshaj Gaur, Aaron Green, Robert Rand, Xiaodi Wu, Michael Hicks, Expanding the VOQC Toolkit, PLanQC 2021
- Liyi Li, Finn Voichick, Kesha Hietala, Yuxiang Peng, Xiaodi Wu, Michael Hicks, Verified Compilation of Quantum Oracles, OOPSLA 2022
- Liyi Li, Yiyun Liu, Deena Postol, Leonidas Lampropoulos, David Van Horn, Michael Hicks, A Formal Model of Checked C, CSF 2022
- Finn Voichick, Liyi Li, Robert Rand, Michael Hicks, Qunity: A Unified Language for Quantum and Classical Computing, POPL 2023
- Yuxiang Peng, Kesha Hietala, Runzhou Tao, Liyi Li, Robert Rand, Michael Hicks, Xiaodi Wu, A Formally Certified End-to-End Implementation of Shor's Factorization Algorithm