Priya Srikumar

https://github.com/priyasrikumar

ps735@cornell.edu

(917) 596-9988

EDUCATION

Cornell University Ithaca, NY
Bachelor of Science in Computer Science; GPA: 3.210/4.000 *Expected graduation May 2021*

- Dean's List Fall 2019
- Relevant Coursework: Object-Oriented Programming and Data Structures, Discrete Structures, Networks, Systems Programming, Functional Programming, Analysis of Algorithms, Operating Systems, Advanced Programming Languages, Pseudorandomness, Category Theory, Compilers

RESEARCH

Professor Nate Foster's Lab Ithaca, NY
Researcher *Sep 2019 - Present*

- Formulated network configuration examples in a novel DSL and analyzed their equivalence via a novel synthesis algorithm that uses weakest precondition encodings in Z3
- Implemented a verification optimization in the above algorithm which improved its scale by an order of magnitude
- Updated a deprecated Z3 serializer written in OCaml, added support for existential and universal quantifiers, and improved its performance speed

TEACHING

CS 4110 – Programming Languages and Logics Ithaca, NY
Teaching Assistant *Aug 2020 - Dec 2020*

- Teaching assistant under Professor Nate Foster

CS 2800 – Discrete Structures Ithaca, NY
Teaching Assistant *Aug 2018 - May 2019*

- Held weekly office hours, graded homework and exams, and maintained a course wiki for over 400 students

PAPERS

Avenir: Managing Data Plane Diversity via Control Plane Synthesis OSDI 2020
Eric Campbell, William T. Hallahan, Priya Srikumar, Carmelo Cascone, Jed Liu, *In submission*
Vignesh Ramamurthy, Hossein Hojjat, Ruzica Piskac, Robert Soulé, Nate Foster

PRESENTATIONS

The Next 700 Compiler Correctness Theorems (Functional Pearl) Ithaca, NY
Daniel Patterson and Amal Ahmed *Cornell PLDG, July 2020*

- Slides available on website!

SKILLS

Programming and Software

- OCaml, Coq, Java, Python, C, C++, LaTeX, G-Code, JavaScript, SQL
- Git, Unix/Linux, Autodesk Inventor, ROS

Languages

- *Fluent:* English, Tamil
- *Business Proficiency:* French, Korean

AWARDS

PLMW at POPL Travel Award New Orleans, LA

- Fully-funded trip to the Principles of Programming Languages conference *January 2020*

Meinig Family Cornell National Scholarship Ithaca, NY

- Awarded to 2% of class for excellence in leadership *August 2017 - May 2021*