# Priya Srikumar

https://github.com/priyasrikumar

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(917) 596-9988

## EDUCATION

Cornell University

Ithaca, NY Ph.D. in Computer Science

Expected May 2026

Cornell University

Ithaca, NY May 2021

B.S. in Computer Science

• Relevant Coursework: Advanced Algorithms, Advanced Compilers, Advanced Programming Languages

# Teaching

**Introduction to Compilers** 

Website

Teaching Assistant for 40+ students

Jan 2022 - May 2022

Programming Languages and Logics

Website

Teaching Assistant for 150+ students

Aug 2020 - Dec 2020

Discrete Structures

Wiki

Teaching Assistant for 350+ students

Aug 2018 - May 2019

# Research

Cornell Department of Computer Science, Professor Nate Foster's Lab

Ithaca, NY

Undergraduate Researcher

Sep 2019 - May 2021

- Worked to develop a synthesis algorithm that analyzes network switch configurations and operations
- Optimized above algorithm to scale its asymptotic performance from linear to near-constant (!)
- Developed a formerly deprecated Z3 serializer, expand its functionality, and improve its performance speed

## Papers

# Avenir: Managing Data Plane Diversity via Control Plane Synthesis

NSDI 2021

Eric Campbell, William T. Hallahan, Priya Srikumar, Carmelo Cascone, Jed Liu, Vignesh Ramamurthy, Hossein Hojjat, Ruzica Piskac, Robert Soulé, Nate Foster

# SKILLS

## Programming and Software

- OCaml, Coq, Java, Python, C, C++, LATEX, G-Code, JavaScript, SQL
- Git, Unix/Linux, Z3, Autodesk Inventor, ROS

#### Languages

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

## Experience

#### Amazon Web Services, Inc.

Boston, MA

Applied Scientist Intern (virtual)

May 2021 - Sep 2021

- Wrote function contracts for to a critical s2n-tls module and checked its memory safety using CBMC
- Developed internal documentation surrounding CBMC and function contracts to increase usability
- Delivered an experience report and technical analysis to over 200 researchers, engineers, and stakeholders

## Amazon.com, Inc.

Seattle, WA

Software Development Engineer Intern (virtual)

May 2020 - Aug 2020

- Built, tested, and deployed a new internal Java API impacting over a million monthly active users
- Presented new product feature using above API to over 300 engineers and managers