Ashwin Srinivasan

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Education

Carnegie Mellon University
BS in Computer Science
Minors: Human-Computer Interaction, Software Engineering
May 2022, QPA: 3.59

Relevant coursework:

- 15-213 Introduction to Computer Systems*
- 10-315 Introduction to Machine Learning*
- 15-210 Parallel and Sequential Data Structures and Algorithms
- 17-214 Principles of Software Construction
- 15-251 Great Ideas in Theoretical Computer Science

Teaching:

- 15-122 (Fall 2019)
- 15-150 (Spring 2020)

Allderdice High School
May 2018, GPA: 4.0

Skills

Languages:
Javascript, Python, HTML, CSS (7 years), Bash, Java (6 years), C (3 years)

Technologies:
Git, Linux (7 years), React, MongoDB, Redis, PostgreSQL (3 years), Angular, Django (1 year)

Volunteering

East Liberty Presbyterian Church
Tackling food insecurity

Allderdice High School
Math peer tutoring

Experience

RESEARCH ASSISTANT, DIDEROT **Sept 2019–Present**
Working on learning management system at CMU to make educational content interactive and accessible. Developing *Python* + *Django*.

SOFTWARE ENGINEERING INTERN, BROADCOM **May–Aug 2019**
Contributed to *Angular* frontend, *Kotlin* + *Spring* backend, and *Node.js* scalable server testing harness for the Mainframe Team Center as part of an agile team.

TEACHING ASSISTANT, LEAP@CMU **Jun 2015–Aug 2016**
Taught local high school students computer science in 7-week summer program.

RESEARCH INTERN, CARNEGIE MELLON UNIVERSITY **Jun 2014–Jun 2015**
Designed and developed plugin to increase user awareness of online tracking.

Projects

CMULAB: SECURE CHECK-IN AND SCORING
Developing *Node.js* + *MongoDB* web service for teachers to score class activities.
★ Adopted by 15-122 at CMU.

FLOW: REAL-TIME WATER CONSUMPTION TRACKER
Created *Node.js* + *Redis* backend to predict water usage with ML algorithm.
★ 2nd place for Riot Games sponsor prize at HackCMU 2018

MACHINE LEARNING ANALYSIS OF JUDICIAL RECORDS
Used *SciKit-Learn* library and *Python* web scraper to collect 12 million case records. Created decision tree to predict future case outcomes with 81.4% test accuracy.

AWESOMEBOT
Built multi-purpose *Node.js* bot for managing over 10,000 online communities.

IMGCAP: AUTOMATED IMAGE CAPTIONING
Generated image captions on-the-fly to aid blind users. Written in *Java* + *OpenCV*.
★ 1st place at PA Junior Academy of Science | 2nd place at Pittsburgh Science Fair

Activities

GOOGLE TECH CHALLENGE **Apr 2019**
★ 1st place team overall, including timed coding challenges and logic puzzles

PLAID UMBRELLA PROJECT **Sept 2018–Sept 2019**
Technical and software lead. Coordinated with electrical and mechanical teams to build umbrella dispenser network, as well as *Node.js* + *MongoDB* backend system.

THE TARTAN **Sept 2018–Present**
Editor for SciTech section. Writing and editing articles, designing weekly paper.

SCOTTYLABS **Sept 2018–Sept 2019**
Gave introductory React talk at Web Dev Weekend 2018. Overhauled *Python* + *Flask* API to make printing accessible on-campus.