

# Ashwin Srinivasan

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🌐 fishdev.xyz

## Education

### Carnegie Mellon University

BS in Computer Science  
Minors: Human-Computer  
Interaction, Software  
Engineering  
May 2022, QPA: 3.5

#### Relevant coursework:

- 15-210 Parallel and Sequential Data Structures and Algorithms\*
- 17-214 Principles of Software Construction\*
- 15-251 Great Ideas in Theoretical Computer Science
- 15-150 Functional Programming
- 15-122 Principles of Imperative Computation

Teaching: 15-122 (Fall 2019)

### Alderdice 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

### Alderdice High School

Math peer tutoring

## Experience

### 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

### ASSURE: CONNECTING NEEDS

Implemented *Node.js* + *MongoDB* + *React* service to make local donations more accessible and secure at TartanHacks 2019.

### 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–Present

Technical and software lead. Coordinating 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.