# DAVID **SHEN**

*Software Engineer*    https://dav.sh/

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## Education

### Boston College
*B.S. in Computer Science*
GPA: 3.93 **Major GPA:** 3.97
Dean's List First Honors.
Aug 2018 – May 2022 *(exp.)*

## Skills

### Languages
C and C++
Go
TypeScript
Python
Dart
Rust
Java
Bash
HTML + CSS

### Technologies
Paxos, Fast Paxos
MongoDB
React + Redux
Flutter
Linux
Git

## Awards

### Codestellation
Judge's Pick
Nov 10 2019

Best Web/Mobile Hack
Nov 4 2018

### Hack the Heights
First Place
Apr 14 2019

### Hack Haverhill
First Place
Nov 17 2018

### BC Hacks
Grand Prize; Hacker's Choice
Nov 11 2018

## Experience

**Microsoft**   Base OS Kernel                                 Redmond, WA   **Remote**
*Software Engineering Intern*                                  Jun 2021 – Aug 2021
- Developed multiple solutions to detect and track down sources of a difficult-to-debug but critical IO Manager memory leak, saving hundreds of developer hours every year.

*Software Engineering Intern*                                 Jun 2020 – Aug 2020
- Brought layering support, a feature highly desired by clients and other companies, to Windows Containers on Windows Desktop. This enables clients to create containers customized for their own purposes.
- Wrote a specification detailing the motivations behind and customer impact of the project.

**Rocket Software**   Zowe App Platform                         **Waltham, MA**
*Software Engineering Intern*                                 Jun 2019 – Dec 2019
- Built a new web interface for mainframes to filter and search for objects in a Db2 database, visualize and explore their hierarchical relationships, and define "Collections" of many objects.
- Designed and implemented a modular plugin system to add Microsoft Language Servers to a browser-based code editor for the mainframe.

**BC GET Delivery** *Student Run Startup*                     **Chestnut Hill, MA**
*Full Stack Developer*                                        Oct 2018 – Feb 2019
- Developed an automated app-to-SMS messaging platform, to ease communication between deliverer and customer and improve customer privacy.
- Discovered and fixed critical security flaws.

**Boston College**                                           **Chestnut Hill, MA**
*Teaching Assistant for Computer Vision*                      Aug 2021 – Dec 2021
*Teaching Assistant for Computer Science II*                 Jan 2019 – May 2019

## Projects

**BC COVID-19 Dashboard**          % *bccovid.dav.sh*   ○ *pantherman594/bc-covid*
Unofficial COVID-19 dashboard to visualize the COVID-19 testing at Boston College during the 2021-22 school year. It automatically scrapes BC's official dashboard to display it in a more informative and user-friendly manner. Built with React and Recharts on the frontend, with a TypeScript backend and MongoDB database.

**In-Person Among Us**
Flutter app that recreates the Among Us game in real life, allowing players to complete tasks, kill nearby crewmates, and report bodies in real time. Tasks are initiated by scanning a QR code at a specified location, which launches the task in the app. The "wires" task was also recreated in real life with an Arduino.

**WikiWhere**                      % *wikiwhere.ciliber.to*   ○ *wikiwhere/wikiwhere*
Visualization of Wikipedia articles and their links. Built with d3 and Express.js, with a bi-directional breadth first search algorithm in C++.

**hackm.app**                      % *hackmapp.dav.sh*   ○ *hackmapp/hackmapp*
Interactive map of the previous, current, and upcoming MLH hackathons. Built with d3, Express.js, and BeautifulSoup.