# Ayush Upneja

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EDUCATION

# Boston University College of Engineering

Boston, MA

Senior, BS Computer Engineering | Dean's List | GPA: 3.56

Sept. 2017 - Expected May. 2021

EXPERIENCE

Amazon

Seattle, WA (Remote)

Software Development Engineering Intern

May. 2020 - Present

Developing a targeting criteria creation and evaluation portal for Alexa Shopping Hints as the end to end project owner.

o Designing database structure (DynamoDB), building back-end APIs (Guice), and writing unit-tests (Cucumber).

Reflexis Systems

Dedham, MA

Software Engineering Intern

Jun. 2019 - Aug. 2019

• Worked with IBM's Cognos SQL business intelligence suite to conduct predictive analysis for retail clients.

Google Cloud

Boston, MA

Student Developer Fellow

Feb. 2019 - Apr. 2019

o Utilized machine learning and data visualization to quantitatively model "Explosiveness" for NCAA March Madness.

• Published and aired four real-time predictions regarding possessions, offensive rebounds, assists, etc.

### Performance and Energy-Aware Computing Laboratory

Boston University, MA

UROP Research Student

Sep. 2018 - Dec. 2018

• Evaluated fuzzy hashing algorithms to develop characterization solution for unnamed submitted jobs in a server.

GE Aviation
Assembly and Test Software Engineering Intern

Cincinnati, OH
May 2018 - Aug. 2018

• Created cloud based vector calculator with Visual Basic and HTML. Used by over 500 Assembly Engineers.

o Developed predictive failure response tool, saving hundreds of waiting hours every week due to recurring faults.

#### PROJECTS

#### Bare Metal Marketplace [Flask, SQLAlchemy, Python]

May. 2020

- Built a marketplace where users can rent and sell bare metal nodes in EC528 Cloud Computing.
- Designed and built the auction engine and double-blind algorithm that matches up bids and offers.

#### Autonomous Crawler: IOT Final Project [C, Node.js, Jquery, Raspberry Pi]

Dec. 2019

- Built an autonomous crawler controlled by a web client through live video streamed with a Raspberry Pi.
- o Can travel any course with stop and start signals from IR beacon and decode a QR code "flag" at end.

# Stardust: \$12,000 Grand Prize Winner @ Capitol Royale [Django, React-Native, Swift, SDL]

Nov. 2019

- o Built an AI Radio DJ that books parking & tickets, and curates music through sentiment analysis and location.
- Assembled application directly into Ford SDL display with a companion mobile interface for passengers.

Bikeable: Best Data Usability Award @ PennApps [Flask, GAE, Leaflet.js, Firebase, NumPy, jQuery, SQL] Sep. 2019

- Created web application that generates safe bike paths in Boston from empirical accident data with routing algorithm.
- Applied heatmap visualizations using Kernel Density Estimation of theft data to denote danger hotspots for parking.

## Relevant Skills

Languages: Python | C++| C | Java | Matlab | SQL | Javascript | HTML/CSS

Frameworks/Technologies: Django | Flask | ASP.Net | Guice | React | React-Native | Latex | Git | Cucumber | Arduino Relevant Coursework: Applied Algorithms | Probability | Linear Algebra | Cloud Computing | Machine Learning

#### LEADERSHIP

College of Engineering Student Body President Manage \$20,000 budget to plan college-wide events for 1800 students.

Dean's Host & Lead Engineering Ambassador

Applied Algorithms Teaching Assistant

Hold weekly office hours and grade homeworks/exams for 83 students.

# AWARDS

DappHero Winner @ ETHLondonUK: Mar. 2020	2nd Place @ JP Morgan Code for Good:	Oct. 2019
Battlecode Top 16 US @ MIT: Jan. 2020	1st Place @ Sonos Challenge:	Oct. 2019
\$12,000 Grand Prize @ Capitol Royale: Nov. 2019	Best Data Usability Award @ PennApps:	Sep. 2019
Best Financial Hack @ HackHarvard: Oct. 2019	Grand Prize @ Google & NCAA Hackathon:	Feb. 2019