

# Ayush Dalmia

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## Education

### Johns Hopkins University

Baltimore, Maryland, USA

B.S. IN COMPUTER SCIENCE AND APPLIED MATH

August 2017 - Present

GPA: 3.96 | Relevant Coursework: Data Structures, Intermediate Programming, Computer System Fundamentals, Automata and Computation Theory, Discrete Math, Calculus III, and Linear Algebra

## Skills

**Programming** C, C++, JAVA, JavaScript, MATLAB, LaTeX, Python

**Web** Django with Python, HTML5, CSS, PHP

**Softwares** MySQL, Arduino, MATLAB, Logger Pro, Graphical Analysis, and Microsoft Office

## Experience

### Johns Hopkins Center for Language and Speech Processing

Baltimore, Maryland

RESEARCH ASSISTANT

September 2017 - Present

- Collaborated with a Ph.D. student to develop the front-end for a system that collects annotations on speech patterns, mimicking Amazon Mechanical Turk.
- Incorporated an existing interface into the data collection system that dynamically interacts with the user using JavaScript/ReactJS.

### Booz Allen Hamilton

Annapolis Junction, Maryland

TECHNICAL INTERN

June 2018 - August 2018

- Developed reconnaissance nodes with a team of interns capable of detecting the location of drug smugglers as they use radios to transmit information while crossing the US/Mexico border.
- Created a web app using Django backed by a MySQL database, HTML, JavaScript, and CSS that would alert officials about the estimated locations of drug smugglers.

### Yale Department of Mechanical Engineering and Material Science

New Haven, Connecticut

RESEARCH INTERN

June 2017 - August 2017

- Developed a 3D model for fluid-driven granular beds to aid in understanding the physics behind grain motion and soil erosion using MATLAB and C++.
- Ran simulations on high performance computing facilities for 3D bumpy granular media to mimic real sands and rocks.

### Naval Submarine Medical Research Laboratory

Groton, Connecticut

SCIENCE AND ENGINEERING INTERN

June 2016 - August 2016

- Designed a 3D model of a submarine control center for the U.S. Navy and optimized human factors and anthropometric methods.
- Incorporated microprocessors and LEDs to simulate the environment of a control center.

## Extracurricular Activity

### CollegeVine

Remote

CONSULTANT

May 2017 - Present

- Helped students discover their interests, develop significant self-motivation, and become high performing individuals.
- Guided both parents students through the entirety of the college admissions process, from editing essays to helping make a final enrollment decision

### Charm City Science League

Baltimore, Maryland

MENTOR

September 2017 - Present

- Worked with middle school students across Baltimore City in building hands-on STEM experiments to prepare them for Science Olympiad competitions.
- Helped to organize the events for both the regional and the state Science Olympiads in Maryland.