

# Kye Burchard

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## EDUCATION

MIT | SB ELECTRICAL ENGINEERING AND COMPUTER SCIENCE  
GPA: 5.0

2017 - 2021

GREAT FALLS HIGH SCHOOL  
GPA: 4.0 | Rank: 1/298

ACT: 35

## WORK EXPERIENCE

MIT MEDIA LAB | UNDERGRADUATE RESEARCHER

Summer 2018

- Designed an algorithm to improve accuracy of location detection for the Rhythm Badges project
- Developed a full data processing pipeline, from raw output to analyzable dataframes, leveraging multi-core processing for efficiency
- Coordinated compliance monitoring for 6 week, 80+ person experiment

HACKMIT | DEVOPS, CORPORATE RELATIONS, LOGISTICS

May 2018 – Present

- Contributed to the development of the 2018 HackMIT website and sponsor portal
- Secured thousands in sponsorship funding for HackMIT and TechX
- Point person for mentors, volunteers, hosting, WiFi, and packages for a 1,000+ person hackathon

MASEEH HALL EXECUTIVE COUNCIL | TREASURER

Jan. 2018 – Present

- Managed allocation, distribution, reimbursements, etc. for a \$75k+ budget
- Developed new budgeting system to continuously, accurately, and quickly track dorm cash flow

POLICY AND PARLIAMENTARY DEBATE

Sept. 2013 – Present

- 1st place at three statewide meets in 2016-17 season
- Research, adaptable/critical thinking, and public speaking experience

## TECHNOLOGIES

ADVANCED	Python, Linux
KNOWLEDGEABLE	HTML/CSS, C++, JavaScript, Bash, Git
EXPLORING	Java, TypeScript, Ruby, nginx, Golang

## PROJECTS

STREETSMARTS | C++, PYTHON, MYSQL, MULTIPLEXING

[lrylander.github.io/StreetSmarts](https://lrylander.github.io/StreetSmarts)

A smart street lamp system for emergency responders, leveraging real-time optimal routing, cloud-based synchronization, and voice activation. Final project for 6.08

HACKMIT HOMEPAGE | HTML, SASS, GULP, JAVASCRIPT

[hackmit.org](https://hackmit.org)

Self-taught HTML/CSS to contribute to the development of the HackMIT 2018 splash page, a landing site for MIT's largest hackathon

## COURSEWORK

FALL 2018 | COMPUTATION STRUCTURES, INTRO TO ALGORITHMS, MATH FOR CS, DIFFERENTIAL EQUATIONS

SPRING 2018 | FUNDAMENTALS OF PROGRAMMING, INTRO TO INTERCONNECTED EMBEDDED SYSTEMS

JAN. 2018 | PROGRAMMING FOR THE PUZZLED, INTRO TO PYTHON, ARTIFICIAL GENERAL INTELLIGENCE

FALL 2017 | MULTIVARIABLE CALCULUS, PRINCIPLES OF MACROECONOMICS