

Kye Burchard

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EDUCATION

MIT | SB ELECTRICAL ENGINEERING AND COMPUTER SCIENCE
GPA: 4.9

2017 - 2021

Great Falls High School | GREAT FALLS, MONTANA
GPA: 4.0 | Rank: 1/298 | ACT: 35 | National Merit Scholar

2013 - 2017

EXPERIENCE

Stripe | SOFTWARE ENGINEERING INTERN

May - Aug. 2020

Microsoft Garage | SOFTWARE ENGINEERING INTERN

May - Aug. 2019

- Designed and implemented a modular, scalable data architecture for an independent intern project
- Initiated and led a reorganization of team's Git workflow
- Facilitated meetings and communication across 4 disparate dev teams to produce a working prototype

MIT Media Lab | UNDERGRADUATE RESEARCHER

May - Aug. 2018

- Designed an algorithm to improve accuracy of location detection for Rhythm Badges project
- Developed a full data processing pipeline, from raw output to analyzable dataframes, leveraging multi-core processing for efficiency

HackMIT | LOGISTICS HEAD 2019, DEV & CORPORATE RELATIONS 2018

April 2018 - Sept. 2019

- Heading up a 12-person logistics team to plan and execute MIT's largest hackathon
- Designed layouts, schedules, and staffing for a 1,200-person event over 3 days

Maseeh Hall | PRESIDENT 2019, TREASURER 2018, WEBTECH CHAIR

Jan. 2018 - Present

- Served as primary interface between the largest dorm on campus and administration
- Led Maseeh Hall in reviving various clubs and committees, resulting in a 20% improvement in retention

PROJECTS

StreetSmarts | C++, PYTHON, SQL

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/Blueprint Homepages | HTML, CSS/SASS

hackmit.org, blueprint.hackmit.org

Self-taught HTML/CSS to contribute to the development of the HackMIT 2018 and Blueprint 2019 splash pages, the landing site for MIT's largest hackathon and high school learnathon/hackathon

COURSEWORK

Spring 2020 6.858 Computer Systems Security, 6.141 Robotics, 18.05 Probability & Statistics
Fall 2019 6.172 Performance Engineering, 6.034 Artificial Intelligence, 18.06 Linear Algebra
Spring 2019 6.033 Computer Systems Engineering, 6.002 Circuits, 6.036 Machine Learning

SKILLS

ADVANCED Python, Linux
KNOWLEDGEABLE HTML/CSS, Javascript/TypeScript, React, C/C++, Git, L^AT_EX, C#, Vim
EXPLORING Rust, Bash, Redux