

# Amit Kumar-Hermosillo

Software Engineering Student



amitkh.me



amit-kumarh



amit-kumarh



amitkh@gmail.com



267-310-6763

## EDUCATION

**OLIN COLLEGE OF ENGINEERING** | BACHELOR OF SCIENCE IN COMPUTER ENGINEERING

Sep 2021 - May 2025 | Needham, Massachusetts

- Recipient of Olin Merit Scholarship
- Relevant Coursework: Software Design (**Python**), Data Science (**Python**), Modeling and Simulation (**MATLAB**), Quantitative Engineering Analysis (**MATLAB**)

Cum. GPA: 3.8 / 4.0

## EXPERIENCE

**AMAZON** | SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2022 – August 2022 | Seattle, WA

- Overhauled inventory compliance tool, allowing company-wide users to easily search and suppress defective inventory
- Refined UI to add 3 advanced search capabilities and improve inadvertent error protection (**JavaScript/React/Redux**)
- Significantly expanded back-end (**Java**) functionality by adding 3 new granularities of action and persistence, removing previous causes for defective inventory leakage
- Deployed as a web application using **AWS** Lambda and API Gateway, with the deployment infrastructure defined using the **AWS CDK** in **TypeScript**

**OLIN FORMULA SAE ELECTRIC** | LOW VOLTAGE (LV) SYSTEMS LEAD

LV Systems Lead June 2022 - Present | Needham, MA

Test Engineer September 2021 – June 2022

- Lead and mentor LV systems team in charge of developing hardware and firmware for core LV & vehicle safety systems, including a LV battery management system, cooling, dashboard, throttle, & brake plausibility devices (**KiCAD, C**)
- Revamped software stack for custom Hardware-in-the-Loop testing suite, accelerating development pipeline through simple and flexible systems-level integration testing and cutting testing time by over 30% (**Python**).
- Designed, developed, and integrated graphical controller-area-network (**CAN**) dashboard in **Python** to make vehicle debugging and logging processes accessible to over 50 team members

**CYBER DEFENSE LABS** | VOLUNTEER INSTRUCTOR

May 2019 - July 2019 | Richardson, TX

- Instructed approximately 50 high schoolers per day in collaboration with Cyber Defense Labs over 6 weeks in intermediate cybersecurity concepts, including virtualization, networking fundamentals and configuration (**Packet Tracer**), Group Policy/Active Directory, Windows and Linux server configuration, and digital forensics

## PROJECTS

**NBA MACHINE LEARNING MODEL** | PYTHON (PANDAS/SCIKIT-LEARN)

- Developed machine learning model that predicts NBA games with 72% accuracy using Python and Scikit-learn
- Scraped historical data to identify correlations between advanced statistics and win percentage; evaluated a team's performance over last 10 games to predict the outcome of their next game

## SKILLS

**SOFTWARE** Python • C • Java • Javascript/Typescript • MATLAB

Markup languages:

HTML/CSS • L<sup>A</sup>T<sub>E</sub>X • Markdown

**LANGUAGES** Spanish • Mandarin Chinese • Tamil

**LIBRARIES/FRAMEWORKS** React • Node.js

Redux • Numpy/Pandas • scikit-learn

**TOOLS/PLATFORMS** AWS • Linux • Git/Github

PCB Design (KiCAD)

## EXTRACURRICULARS

**OLIN MIX AND LATINX ORGANIZATIONS**

SEP 2021 - PRESENT

- Belong to two campus organizations that support first generation students and students of color through campus speakers and conference attendance.

**CONSIDER THIS PODCAST**

MARCH 2020 - MARCH 2021

- Wrote, recorded, edited, and marketed Consider This podcast – over 900 listeners in 36 states and 23 countries

**CAPTAIN OF OLIN ULTIMATE FRISBEE TEAM**

SEP 2021 - PRESENT

**CAPTAIN OF ILTEXAS GHS ACADEMIC DECATHLON AND CROSS-COUNTRY/TRACK**

SEP 2018 - MAY 2021