# **Amit** Kumar-Hermosillo

## Software Engineering Student

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#### **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 PROPEL 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**

 $\textbf{SOFTWARE} \ \, \textbf{Python} \, \bullet \, \textbf{C} \, \bullet \, \textbf{Java} \, \bullet \, \textbf{Javascript/Typescript} \, \bullet \, \textbf{MATLAB}$ 

Markup languages:

HTML/CSS • LAT<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
CAPTAIN OF ILTEXAS GHS ACADEMIC DECATHLON AND CROSS-COUNTRY/TRACK

SEP 2021 - PRESENT

SEP 2018 - MAY 2021