Amit Kumar-Hermosillo

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EDUCATION

Bachelor of Science in Engineering with Computing

May 2025

Olin College of Engineering

- Recipient of Olin Merit Scholarship
- Coursework: Software Design (Python), Data Science (Python), Modeling and Simulation (MatLab), Quantitative Engineering Analysis (MatLab), Design Nature (Solidworks)

International Leadership of Texas GHS, Garland, TX - GPA 104.33/100

May 2021

SKILLS

Software Python | C | Java | Bash | MatLab | Linux | Git | Web Design Languages Spanish | Chinese | Tamil

Fabrication Shopbot | Lathe | 3D Printing | Mill

EXPERIENCE

Olin Electric Motorsports - Formula SAE

Fall 2021 - Present

- Working in team to design, build, test, and race an electric Formula SAE car
- Developed controller-area-network (CAN) input/output system and drive log playback for Hardware-in-the-Loop testing of the car's electrical components. Improved testing efficiency by 20% (Python)
- Wrote and tested firmware for dashboard microcontroller, improving legibility, efficiency, and ease of use (C)

Machine Learning Model in Python

Spring 2021

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

Cryptography in Python

Spring 2020

- Wrote programs to encrypt and decrypt messages in various ciphers, including Caesar Cipher, Transposition, Affine, Vigenre, and Simple Substitution
- Created additional programs to break all these encryptions, implementing brute-force techniques, language detection, frequency analysis, and the Kasiski examination

Cyber Defense Camp at UT Dallas, Volunteer Instructor

Summer 2019

- Instructed approximately 50 high schoolers per day in collaboration with Cyber Defense Labs over 6 weeks in intermediate cybersecurity concepts, including virtualization, networking, configuring Cisco devices (used Packet Tracer), Group Policy, Active Directory, Windows and Linux server configuration, and digital forensics
- Assisted students with lab activities, developed curriculum material, graded completed work, assembled, repaired, and maintained stock of 15 PCs

Olin Baja SAE, Suspension Team

Fall 2021-Present

Design parts and drawings for suspension system on off-road vehicle (Solidworks) and manufacture them using various machining techniques

EXTRACURRICULARS

Olin MIX and LatinX associations

Fall 2021-Present

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

Cofounder and host of Consider This Podcast

Spring 2020-Present

Write, record, edit, and market Consider This podcast – over 800 listeners in 33 states and 16 countries

Captain of ILTexas GHS Academic Decathlon and Cross Country/Track Teams Captain of Olin Ultimate Frisbee Team

Fall 2018-Spring 2021

Fall 2021-Present