Yusuf Morsi

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www.ymorsi.com
https://github.com/ymorsi7
Python, C++, MATLAB, JavaScript

EDUCATION

University of California, San Diego *Fall 2023 – Spring 2025*
- *Machine Learning and Data Science (M.S.)*

University of California, San Diego *Fall 2020 – Fall 2023*
- *Electrical Engineering (B.S.)*
  - *Specialization in Machine Learning and Controls*

University of California, San Diego
- *Business Management (Certification)* *Fall 2020 – Spring 2021*
- *Front-End Web Development (Certification)* *Spring 2020 – Fall 2020*
- *iOS Programming (Certification)* *Spring 2019*

WORK EXPERIENCE

Hardware Engineer Intern, Cisco *Summer 2023*
- Automated analysis process by **analyzing and clustering** device failure data with **H2O.ai** and **Python**, significantly reducing troubleshooting time and operational costs.
- To lower carbon usage at Cisco, I developed a **dashboard** and **presented it live to the entire company** on **CiscoTV**.

Software Engineer Intern, Southwest Airlines *Spring 2023*
- Conducted **anomaly detection** to detect unusual traffic volume, suspicious IPs, and network latency.
- **Automated GTM workflows** for **Ansible** Tower through **full-stack** development, achieving streamlined workflows
- Helped save company $24M annually by launching discounting functionality on Southwest's website rather than third parties.
  - Presented to **Chief Information Officer**

Software Engineer Intern, CarsXE API *Summer 2022 – Spring 2023*
- Assisted in full-stack web development; developed **pip package** for company API
- Led intern license plate recognition software implementation

Undergraduate Researcher, UCSD ECE Department
- **Mobile Systems Design Lab** (Dr. Sujit Dey) *Summer 2022*
  - Assisted in the full-stack development of iOS and Android apps that enable engagement between ML blood pressure platform, patients, and physicians.
- **DigiHealth Lab** (Dr. Edward Wang) *Spring 2021 – Spring 2022*
  - Developed I2C communication code with C++, utilized Eagle to design circuit schematics, and soldered in a lab setting.

PROJECTS

Hate Speech NLP Analysis *Winter 2022*
- Tackled online hate speech by utilizing NLP methods to detect and analyze hate speech on a new streaming platform
  - Wrote **Python** code for **TF-IDF vectorization** and a **decision tree** hate speech detection model for on-time delivery.

Drowsiness Detection with OpenCV and Arduino *Spring 2021*
- Increased student productivity by partnering with a colleague to program software to provide a buzzing alert when detecting user drowsiness and eye-closing (**OpenCV, Arduino, LaTeX**).

LEADERSHIP / AWARDS

- **2nd Place**, _UCSD HARD Hack (April 2023)_
- **Scholarship for Electrical Engineering**, _ACE Mentor Program_ (2019, 2020, 2023)
- **Technical Chair,** _IEEE UCSD_ (Oct. 2022 – June 2023)
  - Responsible for organizing technical workshops and events for the second-largest IEEE student branch in the US.
- **CS Team Lead,** _CS Foreach_ (Oct. 2021 – Feb. 2023)
  - Led other UCSD students to teach a high school student how to create a **full-stack website**.
- **Mentor,** _UCSD ECE Undergrad Student Council_ (Oct. 2021 – Jan. 2023)
  - Met weekly with first-year ECE students at UCSD to advise them and answer their questions about ECE/ML.
- **CSE Outreach,** _Eta Kappa Nu (HKN)_ (Mar. 2022 – Dec. 2022)
  - Visited inner-city San Diego schools to teach K-12 students computer science and engineering fundamentals.
- **Winner of Civic Engagement Category,** _SD Hacks_ (April 2022)
- **Student Spotlight**, _UCSD Extended Studies_ (July 2020)
- **Winner of FRC (First Robotics Competition) San Diego Regional** (2017)
  - Ranked 14 out of 66 teams in San Diego regionals and proceeded to the world championship in Houston, TX.

MORE INFORMATION

- **Languages:** English and Arabic
- Experienced with **ML**, **APIs**, **project management**, **web/app development**, MATLAB, LTspice, Eagle, Vivado