Yusuf Morsi

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

EDUCATION

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

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

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

WORK EXPERIENCE

Software Engineer Intern, CarsXE API *June 2022 – June 2023*
- Assisted in full-stack web development (**Vue/Nuxt.js, Next.js, Sentry.io);** developed **pip package** for company API
- Led intern license plate recognition software implementation [**Python (TensorFlow, YOLOv4, OpenCV, Tesseract OCR)**]

Software Engineer Intern, UCSD Mobile Systems Design Lab (Dr. Sujit Dey) *June 2022 – Sep. 2022*
- Assisted in the development of iOS (**Swift**), Android **[Java, Retrofit, JavaScript (Axios)]** apps that enable engagement between ML blood pressure platform, patients, and physicians.
  - Recipient of UCSD Summer Research Internship Program

Research Intern, **UCSD ECE Department**
- **Mobile Systems Design Lab** (Dr. Sujit Dey) *June 2022 – Sep 2022*
  - Assisted in the development of iOS (**Swift**), and Android **[Java, Retrofit, JavaScript (Axios)]** apps that enable engagement between ML blood pressure platform, patients, and physicians.
- **DigiHealth Lab** (Dr. Edward Wang) *April 2021 – May 2022*
  - Developed I2C communication code with C++, utilized Eagle to design circuit schematics, and soldered in a lab setting.

PROJECTS

Hate Speech NLP Analysis *Dec 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 *Mar 2021*
- Increased student productivity by partnering with a colleague to program software to provide a buzzing alert when detecting user drowsiness and eye-closing.
  - Used **Python (OpenCV)** to write eye movement detection code, **Arduino** for hardware, and **LaTeX** for paper.

LEADERSHIP / AWARDS

- **2nd Place**, *UCSD HARD Hack (April 2023)*
  - Won **second place** out of 23 teams in hardware hackathon by collaborating with 4 colleagues to develop IoT prosthetic
- **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)
  - Won **first place** in division out of 30 teams by working with 3 colleagues to develop site that matches clubs with sponsors.
- **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

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