626.265.1128 | e.sosa@csu.fullerton.edu | edmarcksss@gmail.com

#### **Education:**

California State University, Fullerton | bachelor's degree | Computer Science | GPA 3.2/4.0 | Expected May 2025

• Clubs: Offensive Security Society (OSS) | Association for Computing Machinery (ACM) | Amazon Women of The World | Society of Hispanic Professional Engineers (SHPE) | Hispanic Association of Colleges and Universities (HACU)

Mount San Antonio College | associate | Mathematics | May 2023

#### **Related Course:**

Front-End & Back-End Engineering (Web Application)
Algorithm Engineering File Structure and Databases
Cloud Computing Data Structures/Algorithms
Artificial Intelligence (AI) Machine Learning (ML)

#### **Technical Skills:**

Languages: C/C++, Python, HMTL, CSS, JSON, GraphQL, MYSQL, SQLite3, PHP, JavaScript, Typescript, Angular, React, NextJs

Developer tools: Git, GitHub, VSCode, Firebase, Jira, Vercel,
Unix/Linux systems, AWS Cloud, Ubuntu, Make

### **Professional Experience:**

# Kaiser Permanente | Mental Health Clerk | Full Time

## **September 2023 to Present**

- Engaged with patients, doctors, nurses, and licensed clinicians to address mental health needs, ensuring clear communication and contributing to smoother patient experiences and more efficient service delivery.
- Organized meetings for patients in crisis, successfully mitigating high-risk situations involving suicidal and homicidal ideation through close coordination with clinical teams, which helped ensure patient safety.

## **Edwards Lifesciences | Automation Analysis of Calorimetry Data**

Fall 2024 to Present

- Developed a Python and MATLAB-based script for automated data analysis for a Differential Scanning Calorimeter (**DSC**) test, which measures phase transformation temperatures for various materials that undergo shape memory and phase transformations to ensure quality and reliability.
- Model and analyze material behaviors during phase transformations, processing data with higher efficiency than traditional manual data analysis, extracting key sensitive information, and converting the results into detailed reports.

## **Project Experience:**

Titan Lock Spring 2024

- Developed and deployed a cross-platform password manager using **Python** in a **Linux-based system** to ensure operating system compatibility, enabling a classroom of 35 students to use it seamlessly on launch day.
- Implemented a user-friendly graphical interface using the **TKinter GUI toolkit**, providing an easy user experience, which increased accessibility and ease for non-tech-savvy individuals.
- Engineered secure local storage for user profiles by hashing data with salted encryption, requiring a 16-character alphanumeric string. This design protects against brute force attacks by increasing the complexity of password combos.

# School Database Summer 2024

- Creating Entity-Relationship (ER) diagrams and Relational Models to Develop and host a dynamic webpage using HTML, PHP, and Python to provide seamless access to the school's database for administrators and staff.
- Utilized Python for front-end development, creating a responsive user interface, and **SQL** for backend data management, ensuring efficient querying, retrieval, and modification of school records.

#### Undergrad Research Summer 2022

- Conducted research under Principal Investigator Dr. Joshua Smith at the Gravitational Wave Physics and Astronomy Center (GWPAC). I monitored and recorded temperatures for a cryogenic machine, from room temperature to near absolute zero (Kelvin).
- Developed and coded the cryogenic system using industry-standard programming languages such as **LabView** and **Python**, enabling instruments to record, read, and write data for research purposes.

## Awards:

**Hispanic Scholarship Fund (HSF)**: I was one of the 10,000 students selected to be a 2024 HSF Scholar from a pool of 100,000+ applicants. This award is an acknowledgment of my hard work and dedication.

**Edison International College of Completion STEM Scholarship**: A recipient of a \$1000 award for my dedication and excellence in my STEM career.