# Abdulrahman Sinjab

LinkedIn GitHub https://sinjababdul.github.io/Website-main/abdulsinjab1@gmail.com (858) 925 9827

## EDUCATION

Georgia Institute of Technology

2024 - 2026

M.S. Computer Science: Machine Learning

University of California, San Diego B.S. Cognitive Science: Machine Learning

2021 - 2024

EXPERIENCE

## UCSD Computer Science and Engineering

San Diego, CA

ML Researcher | OpenCV, TensorFlow, OpenAI

Jan 2024 - Present

- Conducted research on invasive species management using AI Compute Data Terrariums and Eco Data Collection devices to enhance early detection and monitoring, while addressing ecological and economic impacts.
- Developed a solar-powered, low-energy AI solution using YOLOv8, achieving 95% accuracy in identifying invasive species, which reduced monitoring costs by 30% and improved detection rates by 20%.
- Evaluated the scalability and effectiveness of the Eco Data Collector and Data Terrarium to ensure optimal data gathering and processing capabilities.
- Awarded a \$50,000 grant and recognized as a finalist in the Pacific Symposium for innovative contributions to sustainable environmental practices.

Targimo

San Diego, CA

Software Engineer | Flask, PyTorch, ML Research

Sep 2023 - April 2024

- $\bullet$  Developed a machine learning-based login system, increasing authentication efficiency by 50% and reducing security breaches by 15%.
- Designed and implemented a machine learning algorithm that prioritized user emails, improving response times and user satisfaction by 30%.
- ullet Conducted thorough testing and debugging of machine learning models to ensure optimal performance.
- Researched and estimated product scalability, providing data-driven recommendations for feature expansion.

#### UCSD Shiley Eye Center

San Diego, CA

Research Intern | Microsoft Excel, Data Analysis

Jan 2019 - May 2019

- Achieved a 25% increase in the accuracy of patient data management by developing a streamlined data management process that enhanced the accessibility and reliability of patient information for ongoing research projects.
- Utilized Excel to collect, normalize, and analyze patient data from over 100 eye exams, contributing to research assessing drug efficacy and treatment outcomes, leading to improved understanding of patient responses.
- Communicated complex technical information about study protocols effectively to patients, enhancing participant understanding and engagement in the research process.
- $\bullet$  Assisted in designing and implementing research methodologies, ensuring compliance with ethical standards and improving the reliability of study results.

# PROJECTS

## **Epileptic Seizure Recognition**

Machine Learning

- Spearheaded the development of machine learning models for EEG seizure prediction, achieving a K-Nearest Neighbors classifier with 99.13% accuracy.
- Conducted exploratory data analysis (EDA) and feature engineering, utilizing Welch's method to identify key predictive patterns.
- Optimized model performance through regularization techniques and scaled feature sets for effective detection across large-scale datasets.

# **Ethereum Fraud Detector**

Data Science

- Developed and led a group project to combat Ethereum fraud by designing methods that classified and predicted over 200 fraudulent transaction anomalies.
- Preprocessed and analyzed Ethereum datasets, creating a supervised machine learning ensemble achieving 85% accuracy.
- Implemented confusion matrices and precision-recall curves to evaluate model performance, enhancing reliability by 20%.

# SKILLS

Languages: Python, C/C++, Java, R, JavaScript, MySQL

Software: TensorFlow, PyTorch, Scikit-learn, NumPy, Seaborn, OpenCV, Flask, Git/GitHub

Awards: UCSD Chancellor Associate Scholar, Pacific Symposium Finalist