# Mohammed Zaid

mdyasinzaidabir@gmail.com | Lake Elsinore, CA | linkedin/mohammed-zaid | github.com/mzaid03 | 562-417-5854

# **EDUCATION**

University of California, San Diego

June 2026

B.S. - Mathematics & Computer Science

Relevant Coursework: Advanced Data Structures, Software Engineering, Supervised Machine Learning, Components and Design Techniques for Digital Systems, Introduction to Numerical Analysis, Modern Algebra II

# **WORK & LEADERSHIP EXPERIENCE**

# **UCSD Associated Students**

La Jolla, CA

Campus-Wide Senator

April 2025 - Present

- Strategically managed an **\$8 million** operational budget, implementing rigorous oversight processes and developing targeted funding initiatives that efficiently allocated resources across campus priorities.
- Orchestrated management systems for **600+ student organizations**, designing streamlined approval processes and resource allocation protocols that enhanced club operations and campus engagement.

VEX Robotics Lake Elsinore, CA

Founder & President

June 2021 - July 2022

- Programmed 1,200+ lines of C for autonomous object-manipulation, integrating motor control, sensor fusion, and path planning; served as lead driver in 20+ test sessions, boosting task speed by 35% and reducing errors by 30% through iterative debugging, PID tuning, and real-time adjustments.
- Architected the robot's control systems using object-oriented design principles, developed comprehensive technical documentation, including UML diagrams, and system architecture specifications.

UCSD Information Desk

La Jolla, CA

Student Administrative Department

September 2024 - Present

- An orchestrated real-time resource allocation system for optimizing student workflow efficiency, implementing data-driven scheduling algorithms that reduced station transition times by 15%.
- Developed and executed escalation protocols for priority customer requests, implementing a structured methodology that ensured 99% on-time delivery of complex orders while maintaining quality standards.

# **PROJECTS** - www.mohammedz.com

FIFA Rankings & Political Corruption Analysis | Pandas, Matplotlib, Statistical Modeling, Data Analysis

• Engineered a robust data science pipeline to analyze FIFA rankings alongside CPI, press freedom, and GDP indicators, employing statistical modeling and Python-based visualizations to reveal long-term correlations between political corruption, institutional strength, and patterns of state-sponsored sportswashing in international football tournaments.

IoT Botnet Detection System | Python, NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, Machine Learning

• Built a machine learning pipeline on the UCI N-BaIoT dataset (7M+ rows, 115 features, 9 IoT devices, 8 attack types); performed preprocessing by removing 157k+ duplicates, correcting a 92.1% imbalance, and applying Min–Max scaling. Trained a Decision Tree (depth = 6,500 samples/leaf), achieving 99.96% accuracy, precision, recall, and F1-score on 205k test samples with only 86 errors, validated through detailed correlation heatmaps, and strategically positioned for scalable deployment with SVMs.

Islamic Prayer Reminder | HTML, CSS, JavaScript, Aladhan API, Open-Meteo API, Web UI/UX

 Developed a location-based Islamic prayer web app using HTML, CSS, and JavaScript, integrating Aladhan and Open-Meteo APIs for dynamic Salah times, Hijri dates, and Quranic verses, with animated dhikr titles, interactive Hadith, dark mode, and embedded prayer guides, delivering responsive, accessible, and spiritually enriching real-time functionality.

# **TECHNICAL SKILLS**

Languages: Java, Python, JavaScript, MATLAB, C, C++ (Intermediate)

**Libraries & Tools:** React, Tailwind CSS, Next.js, Git, Node.js, Firebase, Figma, HTML, CSS, Pandas, Matplotlib **Managerial Skills:** Project management, team leadership, workflow optimization, strategic thinking, user-centered design, accessibility, quality assurance, version control, data integrity, cross-functional collaboration