Mohammed Y. Zaid

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EDUCATION

University of California, San Diego

La Jolla, California

B.S. - Mathematics & Computer Science

Expected Graduation, June 2026

Relevant Coursework: Advanced Data Structures, Software Engineering, Supervised Machine Learning, Components and Design Techniques for Digital Systems, Computing in Python, Discrete Mathematics

EXPERIENCE

Muslim Tech Collaboration

La Jolla, CA

Vice President

April 2024 - Present

- Constructed 10+ full-stack apps using React/Node.js, applying agile sprints to boost member skills 60%+.
- Developed ML pipelines with TensorFlow, streamlining preprocessing and training to reach >95% accuracy.
- Facilitated 10+ resume workshops, creating ATS-ready templates that improved internship callbacks by 30%.
- Led 30+ collaborative projects, enforcing Git/Agile practices to cut delivery time by 35%.

VEX Robotics Lake Elsinore, CA

Founder & President

June 2021 - July 2022

- Formed an organization of 100+ members and served as a mentor, motivator, and team-builder.
- Programmed 1,200+ lines of C for autonomous object manipulation, integrating precise motor control.
- Applied advanced sensor fusion and path planning techniques to optimize robotic task execution.
- Served as lead driver in 20+ test sessions, boosting speed by 50% and reducing errors by 30%.

PROJECTS

PrioritiTask

August 2025 - Present

- Achieved 100% Railway deploys via 2-stage Dockerfile, Prisma migrations, Next.js 14 + Node 18.
- Ensured 100% TLS + offline CRUD with Postgres (Prisma 5), sslmode=require, localStorage fallback.
- Delivered 6+ UX boosts: loaders, progress bar, Ctrl+K, sorting, chips, animated refresh.
- Enabled 1-cmd, type-safe builds using TS 5.5, ESLint, Prisma generate, Git/GitHub workflow.

IoT Botnet Detection System

August 2025 - September 2025

- Refined scalable ML pipeline through UCI N-BaIoT preprocessing, enabling analysis of 7M+ records.
- Improved dataset solidity by removing 157k+ duplicates and fixing imbalance, boosting fairness by 92%.
- Reached 99.96% accuracy through Decision Tree training with tuned depth, reducing errors to only 86.
- Validated intrusion detection via correlation heatmaps on 205k test samples, ensuring scalable deployment.

FIFA Rankings & Political Corruption Analysis

Mar 2025 - June 2025

- Engineered a Python pipeline across 106 countries and 400k+ data points, modeling FIFA trends.
- Automated 1M+ CPI, press freedom, and GDP transformations, uncovering corruption—ranking links.
- Built 25+ dynamic visualizations and 3 K-Means clusters, exposing state-sponsored sportswashing.
- Executed large-scale regression analysis on 100+ models, confirming governance's impact on football.

SyncDocs

September 2024 - December 2025

- Enabled seamless editing for 100+ users through React, TipTap, Node.js, Yjs, with sub-10ms latency.
- Implemented scalable collaboration via Redis-backed presence, ensuring multi-user synchronization.
- Enhanced usability via dark-mode UI and CI/CD pipelines, streamlining deployment processes.
- Achieved local accessibility through containerized microservices and cloud-native design.

SKILLS

Languages: Python, Java, JavaScript, MATLAB, C, C++, Typescript

Technologies & Tools: ReactJS, Next.js, Tailwind CSS, Node.js, Firebase, AWS, Docker, Git/GitHub, Figma, HTML, CSS3, JavaScript, TypeScript, RESTful APIs, Pandas, NumPy, Matplotlib, Data Visualization, Cloud Deployment, CI/CD Pipelines, Responsive Design, Cross-Platform Development, Agile

Platforms: Linux, MacOS, Microsoft

Certifications: HackerRank Software Engineer, HackerRank Python developer, Advanced SQL Programmer