

Hamza Deif

Pismo Beach, CA • (805) 635-5192 • hamzadeif77@gmail.com • linkedin.com/in/hamzadeif • github.com/hamzadeif

EDUCATION

California Polytechnic State University – San Luis Obispo

Graduation: June 2024

B.S. in Computer Science, Minor in Entrepreneurship

Relevant Coursework: Data Structures and Algorithms, Systems Programming, Computer Architecture, Software Engineering, Introduction to Computer Organization, Data Science, Object-Oriented Programming, Introduction to AI

SKILLS

- Languages: Python, Java, C, C++, SQL, JavaScript
- Tech Stack: React, React Native, MongoDB, Firebase, MySQL, SQLite, Node.js, Express.js, Next.js, Pandas Library, Git
- Fluent in French, Arabic, English

EXPERIENCE

Arista Networks - Software Engineer Intern

June 2023 – Sep 2023

- Developed a configuration CLI command using Python and C++, empowering customers to finely customize transmitter equalization profiles for diverse transceivers and cables being plugged into Arista's switches.
- Enabled custom and optimal tuning parameters via CLI, addressing customers' challenge of varied transceiver types and enhancing switch performance.
- Created a complementary CLI show command, simplifying the display of configured profiles and providing customers with a user-friendly tool to view configured tuning parameters.
- Conducted extensive testing on several commands on Arista's switch equipment, ensuring their compatibility and reliability in real-world scenarios.

Toshiba - Software Engineer Intern

Mar 2023 – June 2023

- Collaborated in the full stack development of an enterprise mobile application used by internal employees, allowing effortless management of critical work-related components such as payroll details, benefits, and vacation accruals.
- Enhanced app performance through SQLite database query optimizations and Node.js efficiency improvements
- Contributed to React native front-end development, conducting usability testing, collaborating on bug fixes and code refactoring to improve the app's functionality and user experience.

Cal Poly - Undergraduate Research Assistant (AI for Search & Rescue)

Jan 2023 – June 2023

- Developed and integrated a web-based visualization tool using the Google Maps API, React, and Firebase, enabling the display of clue locations for missing person incidents and reducing Search and Rescue response times by 20%.
- Redesigned the navigation bar of the of the S&R website, resulting in a 30% decrease in time taken for Search and Rescue personnel to access necessary forms, enhancing operational efficiency.

Toshiba - Data Science Intern

June 2022 – Aug 2022

- Conducted data cleaning, analysis, and visualization on multiple datasets by creating new data frames using Pandas library, employing effective data cleaning strategies to ensure high data quality.
- Designed and implemented a physical model to store data in a MySQL database through optimized data storage and organized structure, and created SQL queries to extract desired information.
- Created a Python-based website, developed REST APIs, and visualized insights through graphs and charts using ChartJs library for the decision-makers and business managers to make new marketing and sales strategies.

CONSULTING WORK

Ihsan Solutions - Full Stack Engineer

- Developed a HIPAA-compliant EMR system using React.js, Node.js, Express.js, and MongoDB that fully digitized client's orthopedic private practice's workflow, resulting in a 40% reduction in overhead expenses.
- Streamlined patient visits by extracting and utilizing both patient and doctor questionnaire answers to automatically generate personalized reports. System ensured the secure storage and easy retrieval of patient records, eliminating the reliance on physical files and enhancing overall practice efficiency.

LEADERSHIP & AFFILIATIONS

Muslim Student Association (100+ Members) | Elected Vice President | Cal Poly

Sep 2022 – June 2023

AGHS MSA Club | Co-Founder and President | Arroyo Grande, CA

Aug 2017 - Jun 2020

Five Cities Youth Association | Head Coach | Pismo Beach, CA

Sep 2018 - Jan 2019