Mahdy M. Karam

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Experience

PlusOne Health Expert, Cairo, Egypt (Jun 2022-Aug 2022)

 $Software\ Engineering\ Intern$

- Implemented a cloud storage system using Google Healthcare for patient info and medical imaging files
- Integrated the Google Healthcare API into the OHIF medical imaging viewer, adding Arabic language support.
- Created a front-end system using React.js for users and medical experts.

SigmaFit Egypt, Cairo, Egypt (Jul 2023-Aug 2023)

Research and Development Intern

- Researched tech-wear startups, assessing market viability and user acquisition.
- Gained a comprehensive understanding of mechanical engineering principles for sports analytics products.

EPS EV, Kirkland, WA, USA (Apr 2021-Jun 2024)

Project Manager

- Managed parts orders and contacted companies for converting a 2007 Mazda Miata into an electric vehicle.
- Led Electronic Control Unit recalibration and infotainment system development.
- Directed a team of 15, achieving milestones like self-powered vehicle driving in under two years.

Projects

Squash AI (Dec 2022-Present)

- Developed advanced computer vision techniques for ball tracking in squash gameplay videos with 90% accuracy.
- Contacted experts to optimize algorithms for ball and player tracking, improving performance.
- Building Squash AI's mobile app in Java and Swift for real-time feedback and training analysis.

Railsy (Mar 2024-Present)

- Developed a CLI tool leveraging the mail.tm API to generate temporary emails and check messages.
- Published the tool on crates.io, achieving 110 downloads as of March 2024.

0K-Engine (Dec 2024-Present)

- Developing a chess engine in C++ and Rust using prebuilt libraries for move generation and custom algorithms for move selection.
- Applying optimization methods to solve computational challenges in chess engine development.