ASHRAF HAMMOUD

EDUCATION

University of Michigan - Dearborn

Bachelor of Science in Software Engineering

WORK EXPERIENCE

Pluck

Remote

Full Stack Software Engineer

Nov 2023 - Present

GPA: 3.90/4.00

• Oversaw a complete overhaul of Pluck's Goodpluck site, focusing on UI enhancements and integrating AstroJS, Typescript, Swell, and Vercel. This resulted in a 40% increase in user engagement and a 25% boost in site performance metrics.

University of Michigan - Dearborn

Website Designer

Dearborn, MI Oct 2023 - Apr 2024

- Directed the Engage Detroit Workshop Series, providing invaluable support to Detroit families navigating school choices and college admissions; boosted community engagement by organizing and facilitating 10 impactful workshops, leading to a 50% increase in community involvement and awareness.
- Designed and developed a dynamic website using Webflow and WordPress, integrating custom HTML, CSS, and JavaScript to enhance user experience and accessibility.

Pluck Software Engineering Intern Detroit, MI May 2023 - Aug 2023

- Designed and implemented a weekly product recommendation engine using Python and PostgreSQL, resulting in a 15% sales increase through improved user personalization. Employed product-to-product content-based filtering, along with automated performance assessments.
- Designed and implemented a customer feedback form and a custom Shopify app for automated order processing, resulting in improved customer satisfaction and operational efficiency.

SKILLS

Languages Frameworks & Platforms Tools

Additional Skills

C++, C, Java, Python, JavaScript, TypeScript, PHP, SQL

Spring Boot, React, MySQL, PostgreSQL, Firebase, GCP, Vercel, Docker Visual Studio, Android Studio, Figma, Git, Material UI, HTML, CSS, jQuery Debugging, Testing, OOP, Agile, RESTful API

PROJECTS

 $\textbf{Real-Time Fuel Efficiency Tracking} \ (\textbf{Mobile}) \ \textbf{-} \ \textit{Java, Spring Boot, Firebase, GCP}$

Jan 2023

- Designed and implemented RESTful APIs using Spring Boot and integrated Firebase's Realtime Database for real-time data storage and retrieval from vehicles via OBD-II adapters.
- Hosted the APIs on Google Cloud Platform's Cloud Run by containerizing the Spring Boot application with Docker.
- Developed the Android front end using traditional XML layouts and View Binding, creating simple user interfaces. Integrated Firebase Realtime Database to display real-time vehicle data.

YT Stamps (Chrome Extension) - Python, Flask, Pytest, JavaScript

Mar 2024

- Created a Python Flask API server with routes to fetch YouTube video transcripts and comments, utilizing a transformer model to convert comments into mathematical vectors.
- Implemented cosine similarity to match comments with relevant video transcript sections, identifying precise timestamps with high accuracy (where -1 indicates opposite, 0 unrelated, and 1 highly similar).
- Integrated the API with the Chrome extension to dynamically display timestamped comments on the YouTube page, enhancing user experience by enabling direct navigation to specific video segments.

- Dec 2023
- Collaborated with a team of four to develop the application using an Express is backend with API routes, React for the frontend, and Firebase for Firestore database and authentication.
- Implemented the admin dashboard and live voting feature, utilizing WebSockets for real-time data processing and updates.
- Hosted both the backend and frontend on Firebase, using TypeScript for enhanced developer experience and code reliability, ensuring robust security features for large-scale voting events at conferences with up to 1,000 attendees.

Big Board League (Web) - Next.js, TypeScript, Sanity, CSS

Oct 2023

- Utilized TypeScript to create Sanity schemas and utility functions, leveraging groq (Sanity's open-source query language) for efficient querying of the Sanity CMS.
- Built pages for players, seasons, and games using Next.js, enabling the frontend to retrieve necessary data via custom Sanity utility functions.
- Implemented an intuitive admin portal using Sanity's NextStudio, allowing easy access by appending '/admin' to the URL and signing in, providing a seamless user experience for site administrators.

Job Processor Simulator (CLI, Web) - C++, Javascript, HTML, CSS

Apr 2022

- Pair-programmed to create a job processor using a custom priority queue in C++, applying OOP principles with classes for the Processor and PriorityQueue.
- Recreated the processor as a website using JavaScript, HTML, and CSS to better showcase the efficient allocation of processors for assigned jobs.
- Enhanced the web application to visually demonstrate the performance and efficiency of the job processing system, making it more accessible and user-friendly.

VOLUNTEER WORK

Global Heights Academy

Mar 2022 - Mar 2023

• Helped students with special needs understand math concepts and use the Scratch programming language, supporting their learning and development.

Hope House Jan 2020 - Mar 2022

• Assisted adults with mental disabilities by tutoring for the U.S. citizenship exam, teaching computer skills, and facilitating chess games to enhance cognitive and social abilities.

AWARDS

William J. Branstrom Prize

Apr 2021

1st-term freshmen who rank in the upper 5% of their class.

James B. Angell Scholar

Apr 2020

Students who achieve an "A" record for 2 or more consecutive terms.

REFERENCES

Chening Duker

Lead Developer, Pluck

Email:

Mobile:

Mark Elias

Distinguished Network Architect, Trinity Cyber

Email:

Mobile: