ANTHONY MASSAAD

massaadanthony@hotmail.com | Anthony Massaad | Anthony-Massaad | My Website

WORK EXPERIENCES

Irdeto (8mos) **September 2022 – September 2023**
Software Developer Ottawa, Ontario

- Collaborated with the Irdeto Reference Cloud App (IRCA) team in developing a web application using Next.js and TypeScript.
- Worked with Amazon Web Service (AWS) to host the website, Microsoft Azure to host the database and Auth0 for authentication, ensuring 99.9% uptime and robust security for user data.
- Implemented multiple web pages with internationalization features, adapting to users' preferred languages and improving the user experience.
- Played a pivotal role in creating a TypeScript-based internal component library, providing pre-defined web components and functionalities. This reduced development time by 25% and standardized the codebase across all web projects.
- Spearheaded in the development of a slack bot during corporal hackathon to help maintain and track merge requests from GitLab, enhancing team collaboration and reducing merge request resolution time.
- Optimized the logger implementation using python in one of Irdeto's software components, making logs more efficient and effective. This streamlined the debugging process and reduced bug resolution.
- Provided virtual and manual assistance in maintaining the test framework and machines, reducing test-related downtime by 50%.

Elections Canada (1yr & 8mos) **January 2022 – October 2023**
Website Designer and Developer Ottawa, Ontario

- Led the development of webpages within the Digital Transformation Branch, and utilized HTML, CSS, JavaScript, and JavaScript libraries to create webpages for various teams within the branch.
- Engaged in weekly meetings with key stakeholders to gather requirements, design, and develop their webpages, ensuring alignment with business needs and enhancing stakeholder satisfaction.
- Developed a search algorithm for the Digital Transformation Branch, significantly improving content discoverability and reducing search time.
- Created a custom style sheet and JavaScript file for the Digital Transformation Branch, enabling developers to easily create custom components and animations.
- Spearheaded the development of the Digital Enterprise Transformation Branch using HTML, CSS, and JavaScript, resulting in a modern, user-friendly interface.
- Developed a script file for animating components on web pages using JavaScript, enhancing user interaction and aiding in improved user experience.

SKILLS

Languages: JavaScript, Python, HTML, CSS, PHP, Java, C, SQL, JSON, XML, Ejs, Makefile
Tools & Frameworks: Git, NoSQL, Linux, IntelliJ, Visual Studio Code, PyCharm, Node.js, Express, Socket.io, React, TypeScript, SCSS, UNIX, React-Native, Docker, Jira, Prisma, Spring Boot, Expo

PROJECTS

Music Genre Classifier (GitHub Link**)** — Python, Machine Learning, Deep Learning, Transfer Learning **Apr. 2024**

- Developed a machine learning model using a combination of Convolutional Neural Network and a Support Machine Vector to classify audio files to their Genres.
- Used Transfer Learning through a pretrained model tuned to work with the problem at hand.
- Used tuning techniques like Grid Search to optimize both models for better performance.

Access Control System (GitHub Link**)** — Python, JSON, RBAC, Access Control Matrix **Sept. 2023**

- Simulates a simple login system for Finvest Holdings that allows users to register, and login based on their various roles. The users are given different permissions based on their roles.
- User Credentials are secured and hashed with a 32-byte salt. System also enforces password rules for strong passwords.

Real-Time Elevator Simulator (GitHub Link**)** — Java, UDP, State Machine Design Pattern **Jan. 2023**

- Simulated a real-time elevator control system using Java threads, while following the state design pattern
- Utilized the User Datagram Protocol (UDP) to connect the separate components (floor, scheduler, and elevators) through the network. Either the components can be on the same machine, or separate machine if address is specified.

A-Star Path Finding Algorithm (GitHub Link**)** — Python, Pygame, Priority Queue **Jan. 2023**

- Developed a GUI using pygame to visualize the A-star algorithm, showing the fastest path between two locations

EDUCATION

Carleton University **September 2019 – April 2024**
Bachelor of Software Engineering with Co-op Ottawa, ON

- **CGPA:** 10.25/12 (A-)