Ilyes Gasmi

PROFESSIONAL EXPERIENCE

Software Engineer

Amylior

- Built an interactive website using **PHP** and **MS SQL** to connect wheelchair manufacturers, users, and healthcare professionals, reducing quote response times by **40%** through streamlined ordering and price inquiry features, which improved user engagement and accessibility.
- Developed a **Linux**-based monitoring device to securely collect and transmit real-time wheelchair data to a server via **MQTT** protocol using **Python** and **LVGL**, supporting predictive maintenance to improve healthcare outcomes and prevent costly pressure injuries, saving thousands of dollars annually.
- Created a pipeline which automatically fills hours from Jira to a time sheet, saving employees 15+ hours every week.

AHMS Engineering Intern

Bombardier

- Developed a **Vue.js** front-end and Python **FastAPI** backend for an internal website that streamlined customer database management, resulting in an intuitive UI and a **50%** reduction in editing times.
- Migrated legacy data from an Excel-based system to a structured **SQLite** database, enhancing data integrity and reducing load times by **90%**.

Software Developer

Libro Reserve

- Built and optimized complex **Ember.js** components, refactoring legacy code with **JavaScript** and **jQuery**.
- Implemented RESTful APIs with a **Ruby on Rails** backend and a **PostgreSQL** database to seamlessly deliver real-time data to the frontend, reducing latency and enhancing client responsiveness.
- Actively participated in sprint planning and code reviews, contributing to efficient workload distribution and achieving a 95% on-time delivery rate and improving overall team productivity.

EDUCATION

McGill University	August $2020 - December 2023$
B.Eng Software engineering	$Montreal, \ QC$

Projects

SpacesTLDR.com | Next.js, Python FastAPI, Whisper, Nginx, Git October 2024 – November 2024

- Created SpacesTLDR, an AI-driven platform that delivers summaries of scraped X Spaces (podcasts).
- Leveraged Next.js and Python FastAPI to enable real-time update streaming and efficiently run background tasks, optimizing performance and scalability for seamless user experiences.

Vision-guided Navigation Assistance | React Native, Python Flask, Docker, Git January 2022 – December 2023

- Developed vision-guided navigation assistance using camera and sensor data to detect doorways and provide real-time guidance for users.
- Implemented a Dockerized Flask backend for image processing, enabling efficient and accurate object detection.

LoadMatch | Vue.js, Python, FastAPI, Redis, Git

- Developed a full-stack application using Vue.js for the frontend, FastAPI for the backend, and Redis pub/sub for notifications, enabling a responsive and efficient user experience.
- Implemented server-side events to deliver real-time notifications for new matches, from a heuristic algorithm.

LLM Chatbot | Vue.js, Python FastAPI, SQLite, Llama 2

- Developed a locally deployed RESTful API with FastAPI to facilitate secure, efficient communication with a local large language model, storing message history in SQLite for easy access to past interactions.
- Built a gamified Vue.js interface with an emotion keyword recognition system to provide relevant interactions.

Skills and interests

Skills: Next.js, Vue.js, Python, FastAPI, Javascript, Java, Git, HTML/CSS, SQL, Jira, Docker, Linux Interests: Weightlifting, Boxing, Investing, Reading, Cooking, Marketing, Hackathons

Feb 2024 – Current Vaudreuil-Dorion. QC

kload distribution and

May 2022 – May 2023

May 2023 – August 2023

Montreal, QC

November 2023

July 2023 – September 2023

Dorval. QC