ILIES HARRACHE

GitHub & LinkedIn

EDUCATION

Institut Grasset, Montreal, Canada

DEC in Computer Science: New Media Development and Programming

January 2024 - May 2025

University of Djilali Liabes, Sidi Bel Abbes, Algeria

Masters degree in Computer Science & Information Systems Engineering Bachelor's in Computer Science / Information Systems

September 2022 – June 2024 September 2019 – June 2022

EXPERIENCE

Institut Grasset Computer Science Teaching Assistant (Java)

Aug 2024 - Present

Montréal, Québec, Canada

- Prepared and conducted weekly tutorials attended by over 30 students in the course Object-Oriented Programming.
- · Provided one-on-one mentoring, helping 12 students improve their grades from 60% to over 80% by the end of the semester.

Algérie Télécom Software Engineer Intern

Jan 2022 - Apr 2022

Sidi Bel Abbes, Algeria

- · Full stack development on the Release Engineering team, improving the release of different apps
- · Led enhancement of the company's build system written in Python. Created significant efficiencies such as speeding up compile time by distributing the nightly builds,
- · Collaborated with a distributed team of seven to effectively manage key areas of the internal and external identity stack, ensuring seamless integration and robust security protocols.

Algérie Télécom Computer Network Engineer Intern

Jan 2021 - Apr 2021

Sidi Bel Abbes, Algeria

- · Implemented New Antivirus System: Collaborated with cybersecurity analysts to execute a hospital-wide deployment of a new antivirus system via SCCM, significantly enhancing data security across clinical and research departments.
- · Oversaw Migration of 200+ Computers: Led the successful migration of over 200 computers and virtual machines from Windows 7 to Windows 10, ensuring seamless software compatibility and bolstered data security.
- · Integrated Computers in Surgery Rooms: Partnered with biomedical engineers to strategically relocate medical-grade computers into surgery rooms, enhancing accessibility and functionality while adhering to strict hygiene standards.

PROJECTS

URL Question & Answer Bot, GitHub link

- · Designed the backend in Flask to handle API requests, integrate with OpenAI for text embeddings, and manage interactions with Pinecone for efficient data retrieval.
- · Built a dynamic chat interface in React, handling URL input and interaction with the chatbot, while managing state and effects to streamline user experience.
- · Optimized real-time response streaming, ensuring users receive answers promptly as they interact with the bot.

FreeScribe, GitHub link

- · Utilized Whisper's pre-trained ASR models, trained on 680k hours of data, for accurate audio-to-text transcription and multi-language translation.
- · Architected background processes using Web Workers to handle transcription and translation efficiently, minimizing UI thread blockage and improving performance. .

Clipboard Manager, GitHub link

· Developed a cross-platform (Windows, macOS, and Linux) Python-based clipboard manager to store and access the last 9 copied items using custom shortcuts (Ctrl+L+1 to Ctrl+L+9).

TECHNICAL SKILLS

Python, Golang, java, ReactJS, Redux, Flask, PostgreSQL, MongoDB, Apache, CI/CD