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 **September 2022 – June 2024**
Bachelor's in Computer Science / Information Systems **September 2019 – June 2022**

EXPERIENCE

Institut Grasset **Aug 2024 - Present**
Computer Science Teaching Assistant (Java) 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.

xyz **Jan 2022 - Apr 2022**
Software Engineer Intern 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.

xyz **Jan 2021 - Apr 2021**
Computer Network Engineer Intern 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