Emmanuel Ma

Incoming intern @ Automatic Data Processing

https://github.com/emmanuel-bob-ma-joey

EDUCATION

B.Sc

09/2020 - 05/2024 | Montreal, QC

McGill University

Honours Software Engineering, Minor in Philosophy

Relevant courses: Software Design, Applied Machine Learning, Reinforcement Learning

PROFESSIONAL EXPERIENCE

Software Engineer

05/2022 - 08/2022

Mood Disorder Society of Canada

- Increased user accessibility by 15% by integrating Meta's Wav2vec2 speech recognition model with Flask backend for user speech to text functionality.
- Implemented chatbot timeout logic as a user privacy protection measure.
- Fixed various front end bugs with the chatbot and internal portal.

SKILLS

• Python, Java, C, React, Node.js, NumPy, Pandas, Matplotlib, Flask, MongoDB, HTML/CSS

ORGANIZATIONS

Computer Science Undergraduate Society

01/2022 - present

Helpdesk Tutor

- Tutor undergraduate students weekly on course topics such as Python, Java, C, Unix/Linux, Bash, MIPS, circuitry (Logism), algorithms and data structures, automata theory and software design.
- Spearheaded a COMP250(Introductory computer science) review session with 250+ attendees.

PROJECTS

Compiler for a mini-C lang

project for Compiler Design course

Wrote a compiler in java that supports a subset of the C language, with MIPS assembly as the backend target.

Finance Dashboard @

Personal investment tracker fullstack app

- Developed a responsive fullstack app allowing users to view market trends, latest financial news and track their portfolio.
- Built the backend API enabling stocks to be stored in an online database and make calls to third party APIs.
- Tech stack: React, Node.js, Express, MongoDB, Tailwind, AlphaVantage and Yahoo Finance APIs, Heroku

AI Paperwork Helper 🔗

Web app that uses an ML text summarizer and AI chatbot to make filling out insurance papers easier.

- Developed a web app that enables users to simplify insurance documents.
- Designed and implemented the backend server to run the pre-trained NLP model.
- Tech stack: Flask, HTML/CSS, Bootstrap, Python, Clarifai API

Web Scraper App 🔗

Web App that serves only positive news articles

- Created a web app that scrapes articles from news sites and displays only positive news.
- Designed and implemented the backend server to query the SQL database and run the Python script.
- Tech stack: Vue, Flask, Bootstrap, SQL, Python, BeautifulSoup

AWARDS