David Zhou

in LinkedIn | 📱 438-521-9515 | 🌐 david-zhou-portfolio | ✉ david.zhou3@mail.mcgill.ca | ⚫ GitHub

Skills

- Python, Java, Git, React, MongoDB, Docker, VHDL, OCaml (F24), C(F24), OOP
- Frontend, Backend, Full-Stack, Algorithm and Data Structure - *180+ LeetCode problems solved*
- English, French, Chinese (Native proficiency)

Experience

Research Assistant **National Research Council Canada** **Summer 2024**

- Led the design and development of an innovative marker tracking algorithm for the open-source medical research project, MCSTrack, utilizing Python, OpenCV, and FastAPI.
- Developed and implemented performance testing tools to rigorously evaluate the algorithm's efficiency and accuracy.
- Delivered a concise 3-minute quick pitch presentation of my research paper to a board of research directors, successfully defending its methodologies and findings.

Projects

⚫ GitHub **Magic Chalk (CodeJam)** **11/2023**

- Led the design and development of an educational tool that leverages AI for hand gesture recognition, enabling educators to teach basic mathematics interactively.
- Trained an AI model with 97% accuracy to recognize handwritten numbers.
- Developed the frontend using Streamlit and integrated technologies such as MediaPipe and OpenCV.

⚫ GitHub **AuthentInk (MAIS Hack)** **10/2023**

- Developed a signature forgery detector using a Siamese Neural Network with OpenCV and PyQt5.
- Implemented a user camera to capture handwritten signatures and evaluate their resemblance to authentic signatures stored in a database.

Education

Bachelor of Software Engineering (Co-op) **McGill University**

Montreal, QC **09/2023 - 05/2027 [Expected]**

- Cumulative GPA: 3.94 / 4.0

DEC: Pure & Applied Science **Marianopolis College**

Montreal, QC **08/2021 - 05/2023**

- Mention in the Dean's Honor List for Fall 2021, Winter 2022, Fall 2022 and Winter 2023, Marianopolis College

Others

- **Scholarship**: Recipient of the high school scholarship "Fondation Jean de la Mennais" for exceptional academic and extracurricular achievements. **(06/2021)**
- **Hackathon:** Three-time hackathon prize recipient (MAIS Hack, MariHacks 2022, MariHacks 2021)
- **Bronze Medal**: Won bronze medal in teams table tennis among 149 contestants at the 2019 "Jeux du Québec", the highest-level competition for U18 athletes from Quebec. **(03/2019)**