Orlando Qiu

Personal Website: https://gleeful-narwhal-a0c172.netlify.app/

+ 1 (438) 876-3039 • orlandoqiu@gmail.com • https://www.linkedin.com/in/orlando-qiu/

EDUCATION

McGill University - Bachelor of Science — Montreal, Canada

Major in Computer Science, cGPA of 3.80 — 2023 – 2026

EXPERIENCE

Mortgage Kingdom LLC — Miami, Florida

Full-Stack Software Engineer — May 2024 – August 2024

- Developed a loan officer website using Next.js, Python Flask, Docker, and Google Cloud Run.
- Implemented Google Document AI to extract data from PDF documents such as W2s, paystubs, and 1040 forms.
- Integrated Google Sheets API to automate eligibility calculations for prepayments and mortgage rates.
- Designed a serverless architecture with microservices for efficient backend processing.
- Utilized Clerk for user authentication and Stripe for payment processing.
- Deployed containerized backend services on Google Cloud Run for scalability.
- Leveraged MongoDB for database management and data persistence.

Projects

At Home VPN — Montreal, Canada

September 2024 - Present

- Designed and implemented a personal VPN solution using a Raspberry Pi to securely route internet traffic through a home network from remote locations, bypassing regional internet restrictions.
- Utilized WireGuard to create a fully encrypted VPN tunnel, allowing multiple devices (laptop, smartphone, tablet) to connect simultaneously for activities such as video streaming.
- Configured dynamic DNS and router port forwarding for seamless remote access and maintained strong security protocols through SSH key authentication and certificate management.

Magic Chalk (CodeJam13 Hackathon) — Montreal, Canada

https://github.com/orlololol/Magic-Chalk — November 2023

- Developed an interactive whiteboard application using Python, with hand gesture recognition for drawing and solving equations on the camera.
- Integrated Streamlit for the web interface, providing a user-friendly platform for real-time interaction.
- Utilized OpenCV for image processing and hand gesture tracking, enabling precise control of drawing and erasing functionalities.
- Implemented MediaPipe for gesture recognition, allowing users to draw, erase, and perform operations using natural hand movements.
- Added mathematical solving capabilities using the WolframAlpha API to process and solve equations drawn by the user.
- Created a custom model for digit and operator recognition, enabling dynamic application updates.

Authentink — Montreal, Canada

https://github.com/orlololol/AuthentInk — September 2023

- Created AuthentInk, a signature forgery detection application using Siamese Neural Networks (Siamese NN) and Convolutional Neural Networks (CNN) to verify signature authenticity.
- Developed a PyQt5 interface for capturing signature images and providing real-time feedback on the signature's authenticity.
- Implemented a real-time verification system that compares input signatures against a pre-trained dataset, calculating similarity scores with Siamese NN and Contrastive Loss.
- Utilized Kaggle datasets and preprocessing techniques to standardize signature images for accurate detection and model training.
- Enhanced understanding of AI concepts such as contrastive loss, image processing, and neural networks, while integrating OpenCV for camera functionality.

SKILLS

- Languages: Python, Java, C,Ocaml, C#, HTML, CSS, JavaScript, TypeScript, MySQL, R, Bash
- Frameworks/libraries: React, Next.js, TensorFlow, Keras, sklearn, Flask, Vite, ThreeJS, Raspberry Pi, OpenCV, WireGuard
- Tools: MS Office, Git, Power Bi, RStudio, Docker, Google Cloud, Linux, MongoDB, Google Firebase

Language: Fluent in English, French, and Mandarin.