

Peter Huang

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Education

McGill University: *Bachelor's of Engineering in Computer Engineering* Sept 2024 - Dec 2027

- Relevant Coursework: Data Structures & Algorithms, Software Systems, Operating Systems, Computer Organizations, Software Engineering, Object-Oriented Programming
- GPA: 4.0 / 4.0

Marianopolis College (CEGEP): *Diploma of Collegial Studies in Honours Pure & Applied science* Sept 2022 - May 2024

- **Member:** Marianopolis SFAM Club, Marianopolis Flag Football

Certifications:

AWS Solutions Architect Associate

June 2025 - June 2028

AWS Solutions Architect Professional

July 2025 - July 2028

Work Experience

Incoming Hedge Fund Programmer | Drakkar Capital Jan 2026 - Aug 2026

Tech: Python, C, Lua, Wireshark, XMT

- Implemented a **Lua-based XMT dissector in Wireshark** to extract and decode **stock trade information** from **captured PCAP network packets**, streamlining analysis of financial data streams

Data Engineer Intern | Transport Canada Sept 2025 - Dec 2025

Tech: Azure Databricks, Azure Data Factory, Azure DevOps, Power BI, Git, SQL, Python

- Transformed million-scale **raw data** in varied formats (docx, pdf, html) within the Data Lake into **gold datasets** in the Data Warehouse, built **interactive Power BI dashboards** for business intelligence and data analytical insights.
- Engineered ETL pipelines with **Databricks** and **Data Factory**, leveraged **DevOps** for Git-based version control and CI/CD procedure.
- Improved JSON-like raw data ETL process to optimize efficiency and time complexity by 90%.

AI Developer Intern | CloudAct CPA

Aug 2025 - Sept 2025

Tech: NLP, LLM, Word Embeddings, PostgreSQL, Render, RAG, LangChain, BeautifulSoup

- Developed automated LLM pipeline to monitor **SEC RSS feeds** and extract information from filings (Extraction S-1 filings reached 90% accuracy).
- Implemented **document chunking** and **semantic chunk matching** using word embeddings, designed formatted output retrieval.
- Integrated **PostgreSQL** for structured data storage. Deployed scalable and reliable availability system on **Render**.

Cloud Architect Intern | Coinchain Inc.

May 2025 - Aug 2025

- Architected end-to-end **AWS Cloud solutions**, optimizing cost, performance, security, and scalability using VPC design (public/private subnets, NAT gateways, Internet gateways), EC2, S3, RDS, IAM, CloudFront, and Route 53.
- Supported companies in listing and managing SaaS, AMI, and container products on the **AWS Marketplace**, including setup of billing, metering, and deployment configurations.

Collegial Level Tutoring | Marianopolis College & Private Tutor

Sept 2023 - Current

- Conducted tutoring sessions for 10+ students in Calculus, Mechanics, E&M, and Computer Programming.

Research Experience

Student Researcher | McGill AI Lab

Aug 2025 - Current

Tech: NLP, Word Embeddings, Web Scraping, Data Processing

- Applied large data ETL and word embeddings (**Word2Vec**, **roBERTa**) to implement sentiment analyze news articles on Israel-Palestine conflict bias.

Projects

ITrackApply Google Extension | [youtube](#) | Python, GoogleSheets API, AWS, OAuth 2.0, OpenAI

- Developed a **Chrome extension** that automates job application tracking with **AWS** integration.
- Designed simple and easy-to-use interface using **GoogleSheets API**.
- Implemented secure **OAuth 2.0** authentication and real-time synchronization to **DynamoDB**.
- Built a scalable Python Flask backend deployed on **AWS Lambda** and integrated with **API Gateway**.
- Leveraged **OpenAI** LLM-powered data extraction for extracting data from job posting website, focused on cost optimization techniques.

ScrapeNYT | [github](#) | Python, API, Newspaper4k

- Scrapes 2500+ payload articles per hour from New York Times using **Newspaper4k** and records in JSONL file for further ML purposes.

Cybersecurity & Systems Programming | [github](#) | C, Bash, Cybersecurity

- Developed dynamic memory, async, low-level network servers in **C**, implemented prompt injection and buffer overflow offensive cybersecurity techniques, automated system tasks using **Bash**.

AI MoodDetector | [github](#) | *ML, PyTorch, OpenCV*

- Trained and fine-tuned ResNet-152 Model on emotion image dataset with **PyTorch**, implemented live camera integration with **OpenCV**

Grocery Store GUI Application | [github](#) | *Java, Umple, JUnit, VSCode debugging tools*

- Developed a full-stack grocery store management application as a group project using **Java** with a **Model-View-Controller** architecture.
- Designed system models with Class Diagrams and State Machines using **Umple**.
- Built responsive UI components using **SceneBuilder** and conducted tests using **VSCode debugging tools**.

Warehouse Management System | [github](#) | *React, Node.js, MongoDB*

- Built a **full-stack warehouse management system** using **MERN** stack, enabling real-time inventory tracking, user authentication, and data persistence.

Skills

Programming Languages: Python, Java, C, Bash, JavaScript (Node.js, React, Angular, Typescript)

Databases: SQL, PostgreSQL, noSQL (MongoDB), DynamoDB

Tools: Microsoft Azure, AWS, Git, Bash Shell Scripting, Unity, Power BI

Languages: English, French, Chinese (Mandarin)

Achievements

- 2025 McGill John Howard Ambrose Scholarship
- 2025 McGill Dean's Honour List
- 2024 Marianopolis Dean's List
- 2023 RSEQ Flag Football All-Star Award
- 2022 Football Most Polyvalent Player Award
- 2022 Physics Academic Excellence Award