ANTHONY HO

a55ho@uwaterloo.ca | +1 (226) 406-3006 | https://www.linkedin.com/in/ant52ho/ | https://github.com/ant52ho

SUMMARY

Computer Science and Business student at the University of Waterloo (Class of 2026). Experiences across Software and ML/AI Engineering. Strong computer science fundamentals with proven record of commitment, performance, and impact.

EDUCATION

University of Waterloo, Computer Science and Business Admin. (Double Degree) | GPA: 3.8 / 4.0 *Sep 2021 – Aug 2026*
Awards: 2022 NSERC Undergraduate Student Research Award, 2024 President's Research Award

SKILLS

Languages: Python, Go, PHP, JavaScript, C/C++, SQL
Tools: Pandas, PyTorch, PySpark, Docker, Kubernetes, AWS, Polars

EXPERIENCE

Bree Technologies (YC S21)

Machine Learning Engineering Intern May 2025 – Present
- Converted legacy training & inference pipelines from Pandas to Polars, achieving **>20x** in performance improvements.
- Upcoming task: Leveraging transformers to parse transaction data to predict risk of loan default.
- ***Technologies: Python, SQL, AWS***

TextNow

Software Engineering Intern, Trust and Safety Jan 2025 – Apr 2025
- Deployed features with **no downtime** on high-stake, high-traffic endpoints **(5k/s)** using 100% coverage tests and monitoring.
- Jointly architected and rolled out microservices designed for **scale** and **reuse**, including a GeoIP service and a bulk disabler.
- Won the TextNow company hackathon by designing a RAG-based chatbot in Slack, resulting in a $300 **company award**.
- ***Technologies: Go, PHP, Kubernetes, SQL, AWS, gRPC***

Sun Life Financial

Data Engineering Intern, Client Experience Office Jan 2024 – Apr 2024
- Finalized a SAS-to-Python compiler using **AST traversal**, automating code migration and saving **200+ engineering hours**.
- Used PySpark to process big data (TBs) and contributed in the design of AWS migration, resulting in a **company feature**.
- ***Technologies: Python, PySpark, SQL, AWS***

Huawei

Machine Learning Researcher, Data Driven Networks Jan 2023 – Dec 2023
- Researched machine learning methods towards optimizing parameters for the TCP BBR algorithm, contributing to the team's final solution and **paper acceptance into USENIX ATC '24 (< 15% acceptance rate).**
- Leveraged a variety of ML paradigms such as Causal Forests, HDBScan, XGBoost, clustering, and feature selection (SHAP, CovSel, PS matching), producing a model with inference error as low as **RMSE = 4%**.
- ***Technologies: Python, R***

University of Waterloo

Software Engineering Intern May 2022 – Aug 2023
- Developed an **IoT sensor network** capable of dynamic scaling and **OTA updates** using Raspberry Pis and MQTT protocol.
- ***Technologies: Python, JavaScript, React, SQL, AWS***

PROJECTS

Personal Projects – see https://ant52ho.github.io/
- Projects developed from passion and curiosity. Includes a blog (with a backend), a poop app, some hackathon wins, & more!
- Highlight: AntRAG – a self-made Anthony chat client soon available for trusted blog users.
- Bonus: Implemented classical ML algorithms from scratch, including MLPs, Random Forests, hard-margin SVMs, K-Means, logistic regression, EM, and naïve Bayes. Resulted in comparable results to sci-kit learn.