Ethan Cratchley

778-837-0285 | ethankcratchley@gmail.com | linkedin.com/in/ethan-cratchley | github.com/EthanCratchley | ethancratchley.com

Education

Simon Fraser University

Sep 2022 – Apr 2026

Bachelor of Computer Science and Business Administration (Joint Major) - Concentration in Artificial Intelligence

Coursework: Computer Science 1&2, Data Structures & Algorithms, Calculus, Linear Algebra, Discrete Mathematics, Business Computing, Business Information Systems, Business Statistics, Managerial Accounting, Financial Accounting, Microeconomics. Macroeconomics

Experience

AI/ML Product Engineer Intern

Dec 2024 - Present

Autonommi

Remote · Developed and fine-tuned large language models (LLMs) to optimize natural language understanding and generate high-quality text outputs.

- · Implemented Retrieval Augmented Generation (RAG) models, improving model response and robustness.
- · Collaborate cross-functionally to design, test, and iterate on AI-driven features, ensuring a high quality user experience.

Project Lead Oct 2024 – Present

SFU OS Development Club

Vancouver, BC

- Managed a team, overseeing the hiring and interview process, and coordinating project planning.
- · Led the development of FinancialFastFeed.com using Python, JavaScript, MongoDB, Render, and more.
- Directed product development, ensuring timely delivery and maintaining high-quality software standards.

Innovations Intern Apr 2024 – Aug 2024

Wilson Beck Insurance

Vancouver, BC

- · Answered phone calls from clients using Mitel and communicated with them to give them the support needed.
- Implemented AI-driven automation workflows, improving internal operational efficiency.
- Researched & developed internal company procedures, enhancing process standardization.
- Built projects in Python to improve internal company operations.

Projects

PhishSleuth | Python, scikit-learn, XGBoost, NLP, Feature Engineering

Mar 2025 - Present

- · Built a CLI tool to analyze .eml emails and attachments using NLP and file analysis, outputting phishing scores and flags.
- Trained ML models (Logistic Regression, XGBoost) on phishing indicators (links, sender domain, language, macros, entropy) for accurate classification.
- · Engineered modular components for email parsing, feature extraction, and report generation, with plans to bring the tool to browsers through extensions.

Kaggle Competitions and Projects | Python, PyTorch, Transformers, Random Forest

Feb 2025 – Present

- · Built and trained multiple models on real-world datasets, including XGBoost, Random Forest, and custom deep learning architectures.
- Developed a lightweight Transformer-based language model (~2.7M parameters) from scratch, achieving a loss of ~2.6.
- Placed in the top 5% of the Kaggle House Prices competition through feature engineering and various ML techniques.

Financial Fast Feed | Python, JavaScript, CSS, MongoDB, Git, React, Render

Dec 2023 - Present

- Fetch financial news RSS feeds from 25+ sources with Python and summarize them with Open AI API.
- Store complete data and summarization of RSS feeds to MongoDB at a rate of up to 272 times per day automatically.
- · Developed full-stack web application, integrating real-time analytics and NLP-powered insights.
- Use Crontab to run the program every 2 hours for the most up to date financial news.

Skills, Honors, Certifications, Organizations, and Hobbies

Languages: Python, C, C++, SQL, HTML, JavaScript, CSS, MATLAB, Bash

Frameworks: ChromaDB, MongoDB, React, Next, Node, Express, Flask, Scikit-learn, TensorFlow, PyTorch, Scapy, Wireshark Tools: Git, Linux, AWS, Google Cloud, Figma, Docker, Burp Suite

Competitions & Honors: WinterHacks 2024 Best Pitch, CrackedDevs 2024 Best Educational Project, nwHacks, picoCTF 2025 (Top 20%), Kaggle Housing Price Competition (Top 5%), BMO Marathon Completion

Organizations: SFU OS Development Club, SFU Investment Club, Enactus Capilano

Hobbies: Tri Sports & Fitness, Soccer, Chess, Tennis, Golf, Poker, History