

Benjamin Mah

☎ 647-901-5309 | ✉ benjaminmah.bm@gmail.com | 🌐 benjaminmah.com | in linkedin.com/in/benjaminmahh | 🐙 github.com/benjaminmah

EDUCATION

University of Toronto

Toronto, Canada

Bachelor of Applied Science in Engineering Science

Anticipated Graduation: May 2026

Major in Machine Intelligence with Minor in Engineering Business

Relevant Courses: Data Structures & Algorithms, Neural Networks and Deep Learning, Reinforcement Learning, Machine Intelligence & Software, Operating Systems, Digital Systems, Probabilistic Reasoning

EXPERIENCE

Mozilla

May 2024 – Present

Machine Learning Engineer Intern

Toronto, ON

- Developed, trained, and deployed advanced machine learning models using XGBoost and scikit-learn for automated bug assignment, achieving a **50-hour** monthly reduction in manual triage and improving resolution efficiency.
- Fine-tuned large language models (LLMs) using datasets generated from a custom data collection script using hglb, Mercurial, and Python, amassing over **10,000** unique triplets of commits, enabling highly accurate bug fix predictions and identifying **200** relevant commits monthly while significantly optimizing model performance.
- Automated critical processes in Bugzilla with BugBot, implementing intelligent workflows including auto-requesting flags and dispatching targeted email notifications, improving bug tracking and resolution speed by **40%**.

Cohere

September 2023 – April 2024

Data Specialist

Toronto, ON

- Audited machine learning data, revising errors, boosting accuracy by **15%** while optimizing data processing.
- Collaborated closely with cross-functional teams, including data engineers, to ensure data accuracy, completeness, and consistency, achieving a **98%** accuracy rate and facilitating LLM model refinement and reliability.
- Conducted comparative analysis of machine learning completions, advancing the learning rate of the models.

Royal Bank of Canada

May 2023 – August 2023

Machine Learning Engineer Intern

Toronto, ON

- Worked within the Generative AI team within RBC's Technology and Operations Innovation Labs.
- Developed a machine learning application using semantic search, parallel processing, and prompting techniques to parse, chunk, embed, match, and respond to user questions on financial libraries in both IR and EQA stages.
- Led the development of a multi-type file processing pipeline with retrieval endpoints, accelerating proof-of-concept development by **30%** through the elimination of repetitive code for future projects leveraging generative AI.
- Used Python, LangChain, Qdrant, Amazon S3, and OpenAI models to boost accuracy and efficiency by **67%**.

FlipDoor

March 2022 – April 2023

Co-Founder & Principal Software Engineer

Toronto, ON

- Co-founded a startup focused on implementing a mobile application using AI algorithms to improve pairing with landlords and tenants backed by the University of Toronto Hatchery, an engineering-based startup incubator.
- Principal software engineer using MERN stack and data wrangling to build Tinder-like machine learning algorithm for the rental market, increasing client satisfaction rate by **55%** from conducted surveys and feedback from users.
- Created Figma mockups, conducted market research, and presented business pitches to potential investors with a projected yearly revenue of **\$100,000** nationwide and awarded with **\$10,000** in funding.

PROJECTS

Dubu Chatbot 🦋 | Python, JavaScript, HTML, CSS, Flask, OpenAI API, ChromaDB

- Developed a user-friendly chatbot for small businesses, enabling PDF uploads for custom interactions.
- Engineered to support 8 unique tones, enabling over 255 tone combinations for enhanced user engagement.
- Utilized ada-002 for embedding generation, Cohere's Chat Model and OpenAI's GPT-3.5 for language processing, and ChromaDB for vector storage of the parsed text chunks.

SKILLS

Languages: Python, C/C++, JavaScript, MATLAB, SystemVerilog, RISC-V/Assembly, HTML/CSS, SQL
Frameworks/Tools: LangChain, Flask, PyTorch, TensorFlow, AWS, Git, VSCode, Jupyter Notebook, JAX
Libraries/APIs: pandas, NumPy, Matplotlib, OpenAI, ChromaDB, Qdrant, Gradio, ROS
Interests: Record Collecting, Music Production, Studio Ghibli Films, Formula 1, Basketball