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

Expected 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

Toronto, ON

Machine Learning Engineer Intern

• Continuous Integration and Quality Tools Team (BugBug)

Cohere

September 2023 - March 2024

Toronto, ON

Data Quality Specialist & AI Data Trainer

- \bullet Auditing machine learning data, revising errors, boosting accuracy by 15% while optimizing data processing.
- Collaborating 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.
- Conducting comparative analysis of machine learning completions, advancing the learning rate of the models.

Royal Bank of Canada (RBC)

 $May\ 2023-August\ 2023$

Machine Learning Engineer Intern

• Worked within the Generative AI team within RBC's Technology and Operations Innovation Labs.

Toronto, ON

- 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

 ${\it Co\text{-}Founder} \,\, {\it \& Principal Software \,\, Engineer}$

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.

MoodPalette ☑ | Python, JavaScript, HTML, CSS, Flask, DeepFace Library

- Created an art therapy application leveraging Meta's DeepFace library for real-time facial mood analysis.
- Enhanced user interaction with image capture/retake functionality, adjustable brush sizes, and artwork saving.
- Programmed dynamic adjustments to the color palette and art prompts to reflect the user's emotional state.

SKILLS

Languages:
Frameworks/Tools:
Libraries/APIs:

Python, C/C++, JavaScript, MATLAB, SystemVerilog, RISC-V/Assembly, HTML/CSS, SQL

LangChain, Flask, PyTorch, TensorFlow, AWS, Git, VSCode, Jupyter Notebook, JAX

pandas, NumPy, Matplotlib, OpenAI, ChromaDB, Qdrant, Gradio, ROS

Interests: Record Collecting, Music Production, Studio Ghibli Films, Formula 1, Basketball