Mithil Damani

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mithildamani256

Education

University of Waterloo *Sept 2021 – Apr 2026*
Bachelor in Computer Science (Co-op)

- GPA: 3.7/4.0
- **Coursework:** Algorithms, Introduction to Artificial Intelligence, Introduction to Machine Learning, Deep Learning Specialization (Coursera), Object-Oriented Software Development

Experience

Machine Learning Intern *Dallas, TX*
Cynapta *Sept 2024 – Dec 2024*

- Conducted A/B testing of few-shot and Chain of Thought (CoT) prompting techniques to optimize ChatGPT's performance on web-content-based queries, resulting in 15% improvement in user engagement
- Built full-stack system with Next.js and Firebase, enabling users to generate social media content for their websites, reducing content creation and publishing time by 40% compared to manual workflows
- Implemented RAG-based system by scraping web content from user-provided URLs and incorporating chat history, allowing accurate and context-aware social media content generation

Software Developer Intern *Oakville, ON*
Geotab *Jan 2024 – Apr 2024*

- Enhanced UI components for assets page using React and TypeScript, boosting usability for 100k+ users
- Authored Jest and Selenium test suites in C# to validate functionality and integration of 6 new components

Machine Learning Intern *Burlington, ON*
WealthyPlanet *May 2023 – Aug 2023*

- Fine-tuned GPT-3.5-turbo using a curated dataset based on most preferred ChatGPT responses to build a personal finance optimization engine for 5k+ users, improving user satisfiability by 20% (thumbs-up ratings)
- Trained a reward model on user binary preference data, achieving 75% accuracy
- Added support for the financial chatbot using a bubble.io UI, achieving a usage rate per login of over 70%

Software Developer Intern *Remote*
Niyo *May 2022 – Aug 2022*

- Developed a GraphQL API with Apollo Server using SDL and Typescript, for a banking app with 5k+ users
- Deployed over 30 GraphQL queries and mutations, enhancing the Transactions page performance by 20%

Projects

SynthCheck *kaggle* ↗

- Adapted and fine-tuned ResNet50 model to classify between real and synthetic images
- Conducted grid hyperparameter search and achieved final validation accuracy of 93% and F1 score of 0.92

FaceMask Detection *kaggle* ↗

- Fine-tuned YOLOv8 to detect and localize facemasks in real-world images with 80% accuracy
- Implemented data augmnetation to enhance model robustness, achieving 4% increase in accuracy

Skills

Languages: Python, C++, C, C#, SQL, JavaScript, TypeScript

Tools and Technologies: PyTorch, Pandas, Numpy, Scikit-learn, Torchvision, React, React Native, Bootstrap, Node.js, Git, Jira, GraphQL, MySQL