Andy Craig

📞 647-808-9481 ✉ andycraig200@gmail.com in https://www.linkedin.com/in/andycraig200 ⌨
https://github.com/AndyCraig200

Education

Queen's University   Class of 2024

First Class Honours, Bachelor's of Applied Science in Computer Engineering (GPA: 3.5 / 4.0)   *Kingston, Ontario*

- **Relevant Coursework:** Data Structures and Algorithms (C++), Distributed Systems, Data Analytics, Database Management Systems, Advanced Computer Architecture, Software Performance Engineering, Software Engineering

Experience

Ecobee   April 2022 – May 2023

Machine Learning and Data Engineering Intern   *Toronto, Ontario*

- Oversaw and maintained production services within the Ecobee ecosystem, including ETL batch and streaming jobs (Apache Beam) and machine learning pipelines (Kubeflow) to drive business impact.
- Engineered an end-to-end evaluation pipeline for a Package Detection computer vision model deployed on doorbell cameras, optimizing model performance and scalability.
- Orchestrated the implementation of a Kubeflow pipeline for smoke/CO alarm detection, streamlining deployment and enhancing system reliability through MLOps practices.
- Developed a custom metrics API to monitor production services, ensuring adherence to Service Level Objectives (SLOs) and facilitating proactive issue resolution for continuous improvement.

Pursuit Labs   August 2020 – April 2022

Co-Founder and Lead Software Engineer   *Kingston, Ontario*

- Co-founder and software development team lead at Pursuit Labs, specializing in AI-powered talent management solutions for mid-to-large-scale companies seeking to optimize task allocation systems through machine learning.
- Oversaw all technical components of the product, including the design and development of machine learning models, full product feature specifications, and UI/UX models.
- Achieved 2nd place and secured $5,000 funding at the 2021 Canadian Undergraduate Conference on AI (CUCAI), showcasing early-stage success and innovation in AI-driven product development.

Cactus App   September 2023 – April 2025

Co-Founder and Lead Developer   *Kingston, Ontario*

- Co-founded a cross-platform loyalty rewards application with 3 other co-founders, architecting and developing a complete ecosystem including customer mobile app (React Native/Expo), storefront mobile app, and business web application (Laravel PHP, Vue.js, PostgreSQL) to drive business impact through machine learning solutions.
- Led full-stack development of a production-ready platform serving businesses of any size, implementing core features including QR code-based point collection, rewards management, analytics dashboards, and automated CI/CD pipelines using GitHub Actions and Laravel Forge, optimizing model performance and scalability.
- Successfully exited the company alongside another developer for $20,000 after 19 months of development and market validation, demonstrating strong product-market fit, technical execution, and the ability to apply machine learning to solve real-world problems at scale.

Projects

Workout Analysis App • *Swift, Tensorflow, YoloV8, Python, Flask*

- $Led the development of WorkoutPal, a workout analysis app leveraging YoloV8 pose estimation and computer vision to provide users with feedback on their workouts, including repetition analysis, caloric estimation, and form feedback.
- $Designed and developed an end-to-end machine learning pipeline that deploys model inference to a SwiftUI iOS application, utilizing AWS for hosting the API and implementing MLOps practices for seamless integration.

Technical Skills

Languages: Python, SQL, PHP, Swift, Java, C++, C, Go
Technologies: Google Cloud Ecosystem, Apache Beam, TensorFlow, PyTorch, Kubernetes, Docker, Airflow, Flask
Concepts: Machine Learning, Data Engineering, Artificial Intelligence, Cloud Computing, Distributed Systems, Data Science, Neural Networks, Agile Methodology