

## Education

### • University of xxxxxx

Bachelor of Computer Science

2028

GPA: 3.90/4.00

- Director of xxxx: Led workshops, projects, and hackathons for 1400+ organization members;

## Experience

### • Software Engineering Intern [🌐]

xxxxxxxxxx (Techstars '23)

April 2025 - August 2025

Toronto, Ontario, Canada

- Maintained an Express-powered NestJS backend with REST, GraphQL, WebSocket support hosted on AWS with MongoDB and Firebase integrations, delivering core features launched at the xxxxxx Conference 2025 in collaboration with xxxxxxxx. Press release: [link](#)
- Built a Next.js admin dashboard integrated with NestJS/WebSocket APIs to manage Twitter and Reddit bots, automating text and video responses, boosting social media engagement by 3.2X and cutting moderation time by 80%
- Trained a multilingual TTS model (30+ languages), surpassing ElevenLabs' multilingual model in zero-shot audio quality and naturalness with 64% higher user preference, hosted on Kubernetes scaling to 2000+ concurrent requests
- Designed a RAG translation pipeline on AWS Lambda and S3 serving 100+ videos/day at 70% lower translation cost

### • AI Researcher & Engineer Intern [🌐] [💡]

Full-time / Part-time, September 2024 - April 2025

Los Altos Hills, California, USA

- xxxxxxxxxxxx
- Worked with 20+ engineers simplifying diabetes management under ex-Google Sr. Directors & Meta VPs;
  - Designed and developed a React Native app to visualize real-time glucose and health metrics for users across platforms like Web, IOS, and Android. Integrated REST APIs and caching to improve data latency by 45%
  - Developed novel causal interrupted time-series models in C++ performing quasi-experiments to predict future blood glucose trends, improving the time-in-range of 150,000+ people with diabetes by 60%;
  - Designed a robust sktime training pipeline contributing to a diabetes foundation model with a 25% increase in mealtime blood glucose prediction accuracy for PWD, integrating probabilistic time-series models (ClaSP segmentation, KNN, HMM variants) and ensuring reliability with the unittest framework.

## Projects

### • xxxxx.ca | Tools: Kubernetes, Pytorch, Next.js, Fastapi, Redis, Supabase, Docker, GitHub Actions, AWS

2025 [💡]

- Shipped / [xxxxx.ca](#), reaching 1000+ users in a week; led a team of 15 undergrads in researching and developing a frontier SOTA model powering automatic song-to-piano cover sheet music transcription;
- Implemented 3 microservices on AWS ECS and Kubernetes with ALB-backed networking, VPC isolation, and fine-grained IAM/security group controls; orchestrated Redis-based worker queues and custom GPU capacity providers to scale concurrent audio-to-MIDI inference to 400+ requests in parallel;
- Built a Next.js/TypeScript frontend with auth, real-time dashboard, file uploads, and transcription management
- Developed Python's Fastapi backend for metrics, Stripe payments, S3 I/O, and Supabase integration
- Automated CI/CD using Docker, AWS ECS&ECR, and GitHub Actions with zero-downtime deploys;
- Developed backend & worker autoscaling using Cloudwatch metrics, Lambda, and Eventbridge.

### • SoccerMetrics AI Analysis | Tools: React, Flask, Ultralytics, MediaPipe, pandas, OpenCV, OpenAI, LangChain

2025 [💡]

- Won 2nd/70+ projects at xxxxxHacks 2025 by developing a soccer analysis platform leveraging Ultralytics YOLOv8 for ball detection, MediaPipe GHUM 3D for extracting pose landmarks, and integrated LangChain/OpenAI API for personalized RESTful feedback with a React frontend and Flask backend.

### • Rouvia | Tools: Next.js, Fastapi, MongoDB, Mapbox, Docker, Cohere, Whisper, Google Gemini, Nginx

2025 [💡]

- Built a novel voice-first navigation system powered by a multi-stage RAG pipeline (Whisper → Gemini → Cohere → Google Places → Mapbox) with confidence and caching to handle ambiguity, integrated trendiness scoring with Cohere, GoLang scrapers, and real-time Google APIs stored in MongoDB, and deployed a full-stack app using Next.js 15 + Mapbox GL JS frontend and Fastapi, Docker, Nginx backend.

## Publications

J=JOURNAL

### [J.1] xxxxxxxx, xxxxxxxxx, Hi & xxxxxxxx (2023).

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## Skills

**Languages & Frameworks:** Python, Java, JS, TS, C, C++, PHP, SQL, HTML/CSS, GoLang, Node, React, Express, Next, Nest, Django, Flask, Fastapi, Tailwind, BeautifulSoup, Selenium, Racket

**Tools & Platforms:** Git, Docker, Ubuntu/Unix Shell, AWS, GCP, Azure, Webpack, MySQL, SQLite, MongoDB, Redis, Supabase, Nginx, Kubernetes

**ML & Data:** TensorFlow, PyTorch, Hugging Face, Weights & Biases, CUDA training, Matplotlib, Keras, Tableau, scikit-learn, sktime, pandas, OpenCV, TensorFlow.js, Streamlit, LangChain, Ultralytics, MediaPipe, Cohere, Gemini, OpenAI models

## Awards

**YC AI Startup School 2025 Cohort (top 1%), Velocity Comp 2x Finalist 1x Winner (\$2500), xxxhacks Winner, HiMCM Finalist (top 6%), AIME 2x Qualifer (top 5%), CWSF Silver (top 0.5%, \$12,500)**