# Rhythm Chawla

+1 (437)-667-5557 | Email | LinkedIn | GitHub | Portfolio

#### **EDUCATION**

## University Of Waterloo

Waterloo, ON

Honours Bachelors of Computer Science

April 2028

- Recipient of the **President's Scholarship of Distinction**, awarded for exceptional academic achievement.
- Specialization in Artificial Intelligence, Human-Computer Interaction and a minor in Entrepreneurship.
- Coursework: Object Oriented Programming(OOP), Elementary Algorithm Design and Data Abstration, Tools and Techniques for Software Development, Computer Organization and design, Statistics, Linear Algebra

## EXPERIENCE

## Associate Conversation Design Intern

August 2025

Cresta (Series D AI Startup, Remote) | Python, LLMs, Jupyter, Dialogflow CX, Google Apps Script

CA, Remote

- Developed an LLM-powered redaction auditor that reduced manual transcript QA time by 60%, automatically flagging sensitive or policy-violating content across thousands of weekly interactions.
- Automated annotation tracking and data labeling workflows using **Google Apps Script**, saving the design team **10+ hours/week** across 3+ enterprise projects by eliminating repetitive ops work.
- Performed QA and iterative tuning on Cresta's **Opera** and **Director** platforms for 10 client deployments, improving intent coverage and bot response accuracy by **30%**.

### Software Engineer

August 2024

G12Uni, Enterprise COOP | ReactJS, Python, Flutter, Dart, Docker, GCP

Waterloo, ON

- Co-founded a global platform connecting over **1,500** university students worldwide, fostering collaboration, mentorship, and innovation through networking and resource-sharing opportunities.
- Redesigned the G12 website using Vite ReactJS, improving user engagement through **Tailwind CSS following SaaS principles.** Added multiple APIs for Google Meet, video calls, maps, avatars, chatting systems, chatbots
- Trained **NLP** models on diverse datasets to enable features like Reddit and YouTube scanning, enhancing user engagement. Deployed using Docker.

## PROJECTS

StrumSpace, SpurHacks (Hackathon) | YOLOv8, OpenCV, Flask, React, Vite, 3JS, librosa

June 2025

\* Created an AI AR guitar tutor with **YOLOv8** fret detection, **ThreeJS** chord overlays, and real-time pitch verification for strumming accuracy.

Rhythm, Hack the Hill (Hackathon), Ottawa | Python, Flask, ReactJS

September 2024

\* Built an AI voice coach with **Wav2Vec2** and **SEP-28K** for real-time stuttering detection and speech feedback, with an interactive **ReactJS** UI.

Watopoly, Object-Oriented Programming Project | C++, OOP Principles, Git, MakeFile

March 202

\* Designed and developed a robust Monopoly-inspired game, **Watopoly**, applying core OOP principles including inheritance, polymorphism, encapsulation, and abstraction.

NeuroBridge, Mental Health AI Tool | LLM Finetuning, React, Supabase, Python

July 2025

\* Built **NeuroBridge**, an LLM-powered tool to train users on compassionate communication with individuals facing **BPD escalation**, using **simulated dialogues**, emotion detection, and AI-driven feedback.

Bhasha, Language Learning Startup | NextJS, Flutter, Firebase, Supabase

June 2025

\* Led development for both the web app (NextJS + Supabase) and cross-platform mobile app (Flutter + Firebase) to teach Indian languages, implementing full-stack authentication and deployment.

PawPal, GeeseHacks (Hackathon) | React, TensorFlow.js, Firebase

January 2025

\* Created an AI-based pet care platform to detect health symptoms, recommend diets, and connect pet owners to local sitters using **TensorFlow.js** and Firebase backend.

#### Summary

Languages: Python, JavaScript, TypeScript, C++, Dart, Java, SQL, HTML, CSS

AI & ML Frameworks: TensorFlow, Wav2Vec2, YOLOv8, Librosa, Pandas, NumPy, Matplotlib

Technologies & Frameworks: ReactJS, Next.js, Flutter, Node.js, Express, Firebase, Supabase, Docker, GCP

Tools: Git, GitHub, Bash, Docker, Google Cloud Platform (GCP), Linux

Machine Learning Models: Llama2, DQN, A3C, Reinforcement Learning, Computer Vision