

PRANAV CHOPRA

Work Availability: Summer Full-Time Internships (May to August 2025)

☎ 437-213-4288 ✉ pranav.chopra06@gmail.com 💻 www.linkedin.com/in/pchopr2 🌐 <https://github.com/prananchh>

Education

University of Western Ontario

Bachelor of Software Engineering, Co-op

London, Ontario

Skills

Programming: Dart, Kotlin, Flutter, Python, Java, C, HTML5/CSS3, JavaScript, C++, SQL, Node.js, Arduino, Latex, Kubernetes

Software Skills: Data Structures and Algorithms, Cloud Computing (Azure Portal), Version Control, VS Code, Idle, AWS, MVVM, Generative AI, Predictive Analysis

Technologies/Frameworks: .NET, Power Platforms, Git, GitHub, CAD, MS Word, MS Excel, Computer Vision, React, Django, Flask, OpenCV, MediaPipe, Agile, Collaborative Development Environments, Figma, Miro, Adobe CC, Photoshop, AutoCad, GoogleAnalytics, Microsoft Office Products, Unity

Technical Experience

Software Engineering Intern - Canadian Musicians Co-op

June 2025 - September

- Developed and integrated an audio-input classification model into the web app backend, powering real-time singing feedback (pitch, timing, vibrato/clarity).
- Designed and trained a CNN from scratch using TensorFlow/Keras, including end-to-end audio preprocessing and batching.
- Achieved 99% validation accuracy and 98% test accuracy on a held-out dataset, demonstrating strong generalization.
- Designed for rollout to 300+ musicians at the Canadian Musicians Co-operative, enabling scalable, real-time coaching across the cohort.

Full Stack Software Developer - Tech for Social Impact

Feb 2025 - Present

- Developed a responsive UI with React (web) and React Native (mobile), optimizing state management and component reusability.
- Designed RESTful APIs with Node.js and Express, integrating Firebase/Supabase for real-time data sync and authentication. Configured CI/CD pipelines and deployed via Vercel, Firebase Hosting, and App Store/Play Store.
- Engineered core features including mood tracking, guided meditations, therapist scheduling, and real-time chat support. Utilized Git, Docker, and Chrome Developer Tools for version control, debugging, and containerized development.

Freelance Full-Stack Developer

October 2024 - Present

- Recently designed and launched a user-centric CPA website that boosted business by 20% through clear information architecture, fast load times, and streamlined contact/lead flows.
- Built a full-stack app with React + Next.js (routing, SSR, API routes), TypeScript, and Tailwind CSS—delivering a fast, component-driven UI and clean developer ergonomics.
- Implemented Node.js/Express REST APIs and Next.js API endpoints (email via Nodemailer), integrated external APIs, and deployed on Firebase/Google Cloud with secure env secrets and production monitoring.

Projects

Property Management System

March 2025

- * AI-powered Google Classroom assistant (Streamlit + Gemini) that connects to Classroom/Drive/Calendar to answer questions, summarize materials, manage assignments, and draft communications for teachers and students.
- * Built in Python with a Streamlit UI and Google ADK agents, powered by Gemini via google-generativeai/litellm, and integrated with Google Classroom, Drive, and Calendar through google-api-python-client and google-auth (OAuth 2.0).
- * Improved student experience by 28% time-to-answer (3.6→2.6 min), +12% on-time submissions, and +15% CSAT over a 4-week pilot.

Unity Based 6 Level Video Game

April 2025

- * Built a 2D sci-fi platformer in Unity using C and object-oriented programming to design modular systems for combat, AI, and progression. The enemy behaviors were implemented through inheritance and polymorphism, and the boss fight used a state machine with dynamic phase transitions. I created scalable systems for collectibles, health, and damage, and optimized collision checks and animations for smoother performance. The result was a polished, replayable game that went from a basic prototype to an engaging experience people wanted to come back to.