

NONIT GUPTA

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EDUCATION

University of Waterloo

Bachelor of Computer Science (Honours, Co-op)

International Baccalaureate Diploma, R.E. Mountain Secondary School (Langley, BC)

Waterloo, ON

Sep 2026 – Apr 2031 (expected)

2026

EXPERIENCE

Software Developer (Part-time)

[Cortico Health](#) – North American clinical platform

Sep 2024 – Present

Remote (Vancouver, BC)

- Lead developer of **Cortico AI**, an AI suite deployed across four EMR systems through Cortico's browser extension, which serves **7,000+ medical professionals** across North America
- Built the **Django Channels** / **WebSocket** backend for streamed chat, agentic tools over patient-chart documents, resumable sessions, and access-controlled history
- Built a chart-grounded **form-filler** for 300-field government forms; changed model output from repeated schemas to field IDs and values, cutting output tokens **5–10x** while preserving field-level source citations

Founding Engineer, ROXI (Contract, Part-time)

[Ontario Rheumatology Association](#)

Nov 2024 – Apr 2025

Remote

- Built and deployed the first version of ROXI, RheumView's AI assistant for rheumatologists: GPT-4o chat with patient context, an ambient scribe, and five clinical quick actions
- Prototyped the voice-to-EMR assistant over a **527-field rheumatology schema**, turning clinician speech into structured chart updates; helped RheumView reach **15% of ORA members** (38) by Nov 2025
- Built a citation-backed RAG pipeline over **188 BC and Canadian clinical-guideline PDFs** in Google Cloud Storage, using PyMuPDF, Weaviate, and FastAPI to ground answers and link each source

Founder & Lead Developer

[BC STEM Opportunities](#) – province-wide directory of student STEM opportunities

Mar 2025 – Present

British Columbia

- Launched the directory on React Native/TypeScript and Parse Server; lead a **six-person team** selected as a **Top 30 youth-impact team in Canada** in the 2025 Youth Impact Challenge
- Built semantic search and a human-reviewed **LLM-assisted crawler** with embedding deduplication and source verification; tuning cut review load **62%** (74 to 28 items), eliminating 46 manual checks per run
- Removed a client-exposed Parse master key and moved ~20 privileged operations behind admin-gated Cloud Code, closing a database-wide access-control gap

PROJECTS

Parkinson's Voice Classification | Python, XGBoost, scikit-learn, EfficientNet-B0 CNN

[ProjectBoard](#) | 2025

- Compared acoustic-feature classifiers and an **EfficientNet-B0** spectrogram CNN on 302 sustained-vowel recordings; achieved **92.3% test accuracy**, within the 90%+ range reported in published controlled-condition studies
- Implemented 5-fold stratified cross-validation, a **30-trial XGBoost search**, SMOTE class balancing, and four audio augmentations for the comparison pipeline
- Won a **Bronze Medal at CWSF 2025** (selected from the top 0.2% of projects nationally), \$5,000+ in scholarships, and a \$1,000 **Ingenious+** regional award

PocketDoc | Flutter, Firebase, GCP, Azure, OpenAI

2023 – 2024

- Solo-built a Flutter/Firebase intake prototype with adaptive LLM follow-up questions and an estimated inference cost of **~\$0.04 per test session**
- Replaced the prototype's third-party medical-triage API (\$10,000/month minimum at production pricing) with an in-house OpenAI pipeline without breaking the tightly coupled app around it

TECHNICAL SKILLS

Languages: Python, TypeScript/JavaScript, Dart, SQL

Backend: Django/Channels, FastAPI, PostgreSQL, WebSockets, OpenAI API

Frontend / Mobile: React, React Native/Expo, Flutter, MV3 browser extensions

Tools: GCP, Azure, Docker, GitHub Actions, Playwright, Vitest