

Colin De Vlieghere

📍 Boston, MA; Flexible Northeast US  [linkedin.com/in/colin-de-vlieghere/](https://www.linkedin.com/in/colin-de-vlieghere/)
In-Person / Remote  github.com/Cubevoid

✉ colin.dv@outlook.com
🌐 Portfolio: <https://colindv.xyz>

AI Software Engineer | Cutting-Edge Machine Learning | NLP & Computer Vision

WORK EXPERIENCE

QUALCOMM

Machine Learning Engineer 12-month co-op

Markham, Canada
May 2022 – May 2023

- Enhanced high performance **ML model compiler** for custom **deep learning hardware** accelerator, improving inference time and unlocking new customer use cases for mobile/auto/AR.
- Implemented **model translation** software to convert between custom representations, leading to improved interoperability across different model formats.
- Designed and prototyped a smart Arduino-based ML weather station with no moving parts, contributing to cost savings and coverage in weather monitoring systems.
- Orchestrated software projects across teams and hosted knowledge sharing sessions to boost team productivity and promote **collaborative problem-solving**.

SMARTECHS (AR company)

Software Engineer Intern

Conshohocken, PA
Total 12 months (2019, 2020, 2021)

- Created document-to-JSON parser to increase data processing efficiency.
- Coordinated developers across teams, drafted user stories & Figma designs to improve UX.
- Spearheaded ISO27001 policy draft and defined robust privacy and security policies.

EDUCATION

BSc - Computer Science w/ Focus in AI; Mathematics Minor

University of Toronto

Awards: U of T Scholar, Dean's List Scholar, Innis College Exceptional Achievement

Toronto, Canada
Sept 2019 - June 2024
3.9 GPA

PROJECTS

NLP-based web app to recommend healthy alternatives to food cravings. Uses embeddings from **spaCy**, with custom vector database using **FAISS** for speed. Presents user with detailed results, backed by nutrition facts. [Feeling Hungry](#)

Reinforcement learning AI trained using the NEAT genetic algorithm to play Super Mario. Emulates the game using Gym in Python. [SuperMarAI](#)

Open-source contributions to various projects such as [pkg2appimage](#), a tool for generating Linux versions of apps, or GNOME (Linux desktop) extension [audio-output-switcher](#)

Algorithmic solver for Mathler, a Wordle-like game. Improves brute-force by constraining search space using domain knowledge. [Mathler solver](#)

KEY SKILLS

Python, C++, PyTorch / TensorFlow / TFLite / ONNX, **quantization**, ML model training, inference & theory

Other skills: LLMs, transformers, NumPy, Pandas, C, Java/Kotlin, Docker, Bash, Linux, AWS/GCP, APIs, SQL, Agile development, Scrum, Git, Jira, Confluence

English & French (native/C2), **Mandarin** (spoken/B2), **Spanish** (intermediate/B1)

Team player, excellent interpersonal and multicultural communication skills