

Mike Gao

(365)-996-5533 | m5gao@uwaterloo.ca | [linkedin.com/in/mikegao000](https://www.linkedin.com/in/mikegao000) | github.com/fuselierr | mikegao.ca

TECHNICAL SKILLS

Languages: C/C++, Python, Kotlin, JavaScript, Typescript, Java, C#, HTML/CSS

Frameworks/Tools: React, Next.js, Node.js, Express.js, Django, Git, Bash, Flask, Vercel, PyTorch, Gradle

EDUCATION

University of Waterloo

Bachelor of Computer Science

- Expected Graduation: May 2027

Waterloo, ON

Sep. 2022 – Present

EXPERIENCE

R&D Assistant Developer

Feb. 2024 – May 2024

DupliCALL Co.

Remote

- Researched, locally deployed, and extensively tested **90+** dialogue summarization LLMs using **Huggingface** and other open-source libraries.
- Developed innovative concepts to handle company requirements such as hardware optimization, multilingual translation capabilities, and integration into company call transcribers.
- Streamlined LLM testing methods through development of interactive tkinter GUI interface, improving testing efficiency by **60%**
- Presented culminative research findings via PowerPoint to a team of **10+** software engineers. Showcased GPU efficiency of summarization methods through developed interface.

PROJECTS

Timestamp 🗓️ | *Kotlin, Jetpack Compose, Gradle, Spring Boot, Firebase, Docker*

Sep 2024 – Dec 2024

- Spearheaded a team of 4 software developers to develop a secure time-management mobile app that organizes events, sends timely reminders, and provides real-time user location updates.
- Ensured smooth connection of Frontend and Backend with MVVM architecture & activity-scoped ViewModels.
- Built an intuitive frontend UI using **Material3** design to maximize user engagement, including Mapview page that leverages Google Maps API.

Chess ♟️ | *C++, Git, Flask*

Jul. 2024 – Aug. 2024

- Developed C++ chess application using OOP principles, utilizing inheritance and polymorphism principles for player/piece type hierarchy.
- Utilized MVC and Observer design patterns for user interactions, enhancing reusability/maintainability of code.

HONOURS & AWARDS

3rd Place Overall - UofTHacks 🏆 🦊 | *JS, TS, React, Node.js, Next.js, Vercel*

Jan. 2025

- Created Phish-Eye Lens - a phishing puzzle web-app that leverages **Gemini API** to generate & simulate unique user data for password-cracking clues.
- Employed **blackbox** LLM-tuning methods to ensure the model protects the puzzle solution regardless of user interference (through live LLM chat roleplay) but maintains intuitive and creative scenarios.

Best Use of APIs - GeeseHacks 🦊 🍷 | *React, Node.js, Express.js, VertexAI*

Jan. 2025

- Developed an AI-powered employee onboarding assistant that guides new hires through their workspace setup, offering live audio instructions and monitoring their progress in real time through their display.
- Adapted industry-leading LLM prompting methods and **RAG** techniques fine-tuned for live audio guidance, increasing output accuracy by **80%**.
- Integrated **Google Cloud APIs** (TTS, STT, Vertex AI) and a custom client to enable real-time audio/video interaction and seamless progress monitoring.
- Designed a **RESTful API** with **Express.js** for **7** unique server endpoints, supporting Frontend file uploads and audio/video stream management.

Best Hack: Resolutions - United Hacks V2 🦊 | *Android Studio, Gradle*

Jan. 2024

- Implemented an Android Studio mobile app that helps users achieve quality sleep through a virtual pet.
- Included a comprehensive UI/UX setup menu to add customizability to user experience.