Daina (Dayoung) Kim

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EDUCATION

University of Toronto *Sep 2021 - Apr 2026*

- Bachelor of Applied Science in Computer Engineering + PEY Co-op
- **Awards:** Dean's Honour List (Fall 2021, 2022, 2023), Faculty of Applied Science & Engineering Admission Scholarship

TECHNICAL & SOFT SKILLS

Programming: C, C++, Python, Shell Script, Go, HTML/CSS, SQL, MATLAB, Assembly, Verilog, OCaml
Tools & Frameworks: Git, Docker, Django, Raspberry Pi, REST API, WebSocket Channels, Sphinx, PyQt, Modelsim, Multisim, Quartus
Language: English, Korean

PROFESSIONAL EXPERIENCE

The Six Semiconductor (TSS) Markham, ON

Software Engineering Intern *May 2024 - Aug 2025*

- Led the **full-stack** development of PHYVision, a production-ready GUI for configuring and validating LPDDR PHY IPs via hardware-in-the-loop testing
- Overhauled PHYVision by refactoring **80%** of its frontend/backend, migrating from **Django REST API** to a custom **TCP** server, and containerizing with **Docker** for better performance, maintainability, and cross-platform support.
- Developed a Python-based web scraper aggregating **1,000+** LPDDR/DDR specs from 4-5 major competitors to support benchmarking and product strategy.

Programming Research Laboratory, Seoul National University South Korea

Research Intern *May 2023 - Aug 2023*

- Collaborated on a **Samsung-sponsored** research project analyzing the company's complex CI build system, focusing on the structure and syntax of **Makefiles** and **Batch** scripts.
- Researched and documented command patterns and control flow constructs to support the development of a static analysis tool for build configuration tracing.

PROJECT EXPERIENCE

Google Map Application Project, University of Toronto *Jan 2023 - Apr 2023*

- Developed a C++ map application with a responsive EZGL frontend and implemented path-finding algorithms (Dijkstra's, A*) using optimized data structures and object-oriented design for efficiency.

Table Hockey Design Project, University of Toronto *Mar 2023 - Apr 2023*

- Developed a table hockey game in C running on the ARM processor of the DE1-SoC, rendering gameplay via VGA output.
- Implemented double-buffered graphics rendering using a pixel buffer controller on the FPGA, enabling smooth visual output.

Engineering Strategies & Practices II Project, University of Toronto *Jan 2022 - Apr 2022*

- Proposed UV light lamp solutions to boost TTC Line 1 subway ridership during COVID-19 by eliminating 99% of airborne SARS-CoV-2 particles, in collaboration with a transit consulting firm.

Computer Fundamentals - Reversi Game, University of Toronto *Apr 2022*

- Built a text-based Reversi game in C with move computation algorithms for human and AI players.

EXTRACURRICULAR ACTIVITIES

University of Toronto Korean Engineering Students' Association (UTKESA)

President *May 2024 - Present*

- Led and grew a 30+ member student club, fostering team cohesion, improving communication, and mentoring junior students.

Academic Director *Sep 2023 - Apr 2024*

- Organized seminars and study sessions, while mentoring peers on academics and career prep.