

Myunghoon (Gavin) Choi

Burnaby, BC • 438-728-2515 • myunghoon.choi@mail.mcgill.ca

PROFESSIONAL SUMMARY

Electrical Engineering graduate (B.Eng., McGill, 2024) with hands-on experience in semiconductor fab simulation, IoT data systems, and Python-based data analysis. Industry experience includes a 12-month internship at Ericsson Canada and a semiconductor R&D internship at DAIM. AWS Cloud Practitioner certified.

TECHNICAL SKILLS

Engineering & Analysis: Python data analysis (NumPy, Pandas, Matplotlib), Statistical analysis, Technical reporting, Digital twin / simulation modeling, Embedded systems fundamentals (coursework)

Hardware & Lab: Semiconductor fab process simulation, MQTT industrial protocol, OpenTelemetry observability, Lab measurement (academic coursework)

Languages & Tools: Python, C#, Java, TypeScript, JavaScript, SQL, MATLAB (coursework), Git, Linux, Docker

Software & Cloud: Spring Boot, Django, REST APIs, Firebase, AWS (Cloud Practitioner certified), Cucumber (BDD), Agile/Scrum

PROFESSIONAL EXPERIENCE

Full-Stack Developer — Rise Partners, Vancouver, BC

Nov 2025 – Jan 2026

- Migrated a legacy React platform to Next.js with Server-Side Rendering and refactored Firestore data layers, improving performance and reducing operational cloud costs.
- Designed strictly-typed component architecture in TypeScript, accelerating iteration speed for a small startup engineering team.

IoT Developer Intern — Ericsson Canada, Montreal, QC

Jan 2023 – Dec 2023

- Contributed to Ericsson Drone Mobility (EDM), a cloud platform for managing enterprise drone fleets through a web-based control interface, within a structured 12-month engineering internship at a global telecommunications company.
- Built backend microservices in Java/Spring Boot exposing REST APIs to the EDM web platform; integrated OpenTelemetry for distributed tracing, metrics collection, and observability across services.
- Implemented automated feature tests with Cucumber (BDD) for regression coverage; configured Keycloak for authentication, multi-tenant roles, and SSO; collaborated across cloud, network, and platform teams.

Software Engineer Intern — DAIM Research, Seoul, South Korea

May 2021 – Aug 2021

- Developed a digital-twin emulator of a semiconductor fabrication plant in Unity (C#), modeling transport machines, process flows, and operational states across the simulated fab floor.
- Generated large-scale synthetic datasets to train AI models for fab optimization; streamed real-time simulation telemetry over MQTT (industrial messaging protocol) in Python to a reinforcement-learning model for closed-loop training.
- Built a Flutter monitoring dashboard providing real-time visibility into transport machine status — an NPI-style fab visibility tool.

ENGINEERING PROJECTS

Satellite Tasking & Scheduling Optimization — Canadian Space Agency Capstone

Sep 2023 – Apr 2024

- Partnered with engineers at the Canadian Space Agency on a web-based system for optimizing satellite observation schedules under physical constraints (orbital mechanics, sensor windows, downlink availability).
- Implemented a hybrid greedy + multithreaded simulated-annealing optimizer with Skyfield orbital propagation; performed runtime/convergence analysis and produced technical documentation for CSA stakeholders.

Silver Buddy — Johns Hopkins MedHack (Best Use of Google Cloud, Winner)

Sep 2021

- Led a five-person team to deliver a working prototype within 36 hours; built mobile frontend with cloud backend integration and a KNN recommendation algorithm.

EDUCATION

Bachelor of Engineering, Electrical Engineering — McGill University, Montreal, QC

May 2024

CERTIFICATIONS & AWARDS

AWS Certified Cloud Practitioner (Amazon Web Services) • **Best Use of Google Cloud** — Johns Hopkins MedHack 2021