

DONGHAN KIM

(604)339-7060 | me@hankim.dev | hankim.dev | linkedin.com/in/han-dh-kim

TECHNICAL SKILLS

Languages: C, C++, Java, Python, TypeScript, Go, Bash

Frameworks/DB: Node.js, React.js, Next.js, JUnit, pytest, SimPy, MySQL, MongoDB

Cloud/Infra: AWS, OCI, Terraform, Docker, Kubernetes, Linux, Slurm, Git

TECHNICAL EXPERIENCE

Undergraduate Research Assistant

Vancouver, BC

University of British Columbia

May 2025 – Present

- **Research focus:** Optimizing serverless resource allocation to reduce provider costs while preserving **SLAs**
- Built benchmarking tools in C and Bash to validate simulator behavior against real OCI instances
- Provisioned and tested **130+ OCI instances** with Terraform to validate cloud performance assumptions
- Built **Slurm-based HPC workflows** on the Alliance CCDB cluster to run large batches of simulations in parallel
- Collaborating on current work to extend the simulator for **LLM-oriented serverless workloads**

Undergraduate Teaching Assistant

Vancouver, BC

University of British Columbia

Sep. 2025 – Jun. 2026

- Teaching Assistant for CPSC 313 and CPSC 317, covering systems, computer architecture, and networking
- Led tutorials and office hours on assembly-level programming, OS concepts, network protocols, and DNS resolution
- Developed tutorial materials and received strong student evaluations, with **SEI averages of 4.7–4.9/5**

Web Developer Intern

Remote, Germany

Phytometrics UG

Sep. 2023 – Dec. 2023

- Developed full-stack web application features using React.js, Node.js, and MongoDB
- Collaborated in a remote startup environment to implement application updates and troubleshoot issues

TECHNICAL PROJECTS

DNS Visualizer | Personal | Go, TypeScript, React Flow

May 2026 – Jun. 2026

- Built an interactive DNS query trace visualizer with React, TypeScript, React Flow, and Go
- Implemented a Go backend that sends UDP DNS queries, parses responses, and exposes query/health endpoints
- Rendered iterative DNS resolution from root servers to TLD, authoritative nameservers, and final A records

Secure Healthcare IoT Gateway | Academic | Python, Terraform, AWS

Nov. 2025 – Dec. 2025

- Built a prototype gateway for simulated healthcare IoT traffic with policy-based request validation
- Implemented TLS metadata checks, audit logging, and access-control logic for security-sensitive device data
- Provisioned AWS Lambda and S3 with Terraform and validated behavior with unit tests and failure simulations

Eclipse | Collaborative | C++, OpenGL

Sep. 2025 – Dec. 2025

- Collaborated in a 7-person team to build a C++/OpenGL top-down shooter
- Voted best game in CPSC 427, Video Game Programming, for the term by an invited industry jury

CERTIFICATIONS & AWARDS

AWS Certified Solutions Architect – Associate

May 2025 – May 2028

NSERC Undergraduate Student Research Award

2025, 2026

EDUCATION

University of British Columbia

Vancouver, BC

BSc: Honours in Computer Science, Software Engineering option (4th Year)

Sep. 2022 – May 2027

- CGPA: 4.10/4.33 (Average: 89.6%)
- Admitted to the competitive Software Engineering option, limited to 30 students