Tommy (Kanggeon) Oh

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TECHNICAL SKILLS

Programming Languages: C/C++, Python, Java, JavaScript/TypeScript, Rust, HTML/CSS
Frameworks / Libraries: React, SpringBoot, Node.js, Bash script, Jest, Pytest
Developer Tools: Git/GitHub, GitHub Action (CI/CD), Postman, Amazon Web Services, Docker

SUMMARY OF QUALIFICATIONS

- Experienced in cloud-native development and DevOps practices, including CI/CD automation, container orchestration, and serverless deployment for scalable applications
- Applied AI algorithms by implementing Conflict-Based Search for Multi-Agent Path Finding, analyzing constraints and optimizing agent coordination
- Led the Open-Source teams as the president of the SFU Open-Source Development Club, driving 3+ active projects from proposal to deployment

EXTRACURRICULAR

President   April 2024 – Present
SFU Open Source Development Club   *Burnaby, BC*
- Organized and provided **constructive feedback** on project proposals, ensuring alignment with club goals
- Hosted and maintained club projects on **GitHub Pages** and **AWS** for scalability and seamless deployment
- Guided members in **Open-Source development practices**, empowering them with industry-relevant skills

PROJECTS

Multi-Agent Path Finding | Python, JavaScript, Conflict-Based Search   May 2025 - Present
Software Engineer
- Implemented the **Conflict-Based Search** algorithm to generate optimal, conflict-free agent paths
- Ensured CBS algorithm reliability by creating a **Pytest** suite to validate against simple and complex constraints
- Researched Multi-Agent Path Finding variants to analyze trade-offs in advanced pathfinding problems

Multiagent Developer bot | AWS Lambda, Docker, GitHub Action, Python | ⊙   Jan 2025 - Present
Scrum Master
- Utilized **Large Language Model** with predefined instructions for agent-specific responses
- Containerized the environment for execution, ensuring portability and consistency using **Docker**
- Deployed via **AWS Lambda** with **GitHub Actions** for serverless execution and automated CI/CD pipeline
- Implemented automated testing with **Bash script** for streamlined validation and code quality

Cannon Chaos | python, pytest, TCP protocol | ⊙   Mar 2025 - Apr 2025
Software Engineer
- Designed a custom networking protocol for efficient real-time synchronization between the server and clients
- Implemented **TCP socket communication** for reliable game state transmission
- Created **Pytests** for clients and server for a robust and reliable connection for the game

SWE Resume Classifier | React.js, Express.js, Firebase | ⊙   May 2023 - Aug 2023
Software Developer
- Built a **React-based SaaS platform** that analyzes resumes and provides structured feedback
- Implemented OAuth authentication with **Firebase** and **Express.js**, ensuring secure user access
- Designed interactive **React** components for visualizing resume data and insights

EDUCATION AND CERTIFICATION

Bachelor of Science in Software Systems   Sept. 2022 – Present
Simon Fraser University   *Surrey, BC*

Innovation and Entrepreneurship certificate   Jan. 2025 – Present
Simon Fraser University   *Burnaby, BC*