Neo Hyldelund

778-874-9963 | neo.hyldelund@gmail.com | linkedin.com/in/neohylde | github.com/NeoHylde | neohyldelund.com

Summary

Software engineering student experienced in C++, Java, and JavaScript. Skilled in systems programming, game engine design, and AI-powered tools. Passionate about building performant, testable software in collaborative environments.

Education

Simon Fraser University   Burnaby, BC
Bachelor of Science in Computing Science,   *Current*
Data Structures & Algorithms, Software Engineering, AI & Machine Learning

Academic Projects

Grow-the-Hoard | Java, Maven, OpenGL, LDtk, JUnit   Jan. 2025 - Mar. 2025
2D top-down maze game with custom levels and AI enemies

- Built a fully functional 2D maze game in Java with custom level design, OpenGL rendering, and A* pathfinding for dynamic enemy behavior.
- Developed a comprehensive JUnit test suite with JaCoCo reports, achieving 100% coverage on core gameplay logic.

Personal Projects

Doom Clone 3D Game | C++, OpenGL, GLM, GLTF, A*, JSON   Jul. 2025 - Present
First-person shooter game, inspired by Doom (1993)

- Built from scratch in C++ using OpenGL, featuring a custom glTF model loader (via nlohmann::json) to render textured 3D assets.
- Developed a modular AI system using A* pathfinding on a tile-based graph, enabling real-time enemy pursuit and adaptive movement.
- Engineered custom mesh creation, collision detection, and shader-driven lighting.

Personal Portfolio Website | NextJS, TailwindCSS   Jun. 2025
Introductory portfolio website, with a sleek and simple design

- Built a responsive portfolio site using Next.js and Tailwind CSS to showcase projects and development experience.
- Designed modular, reusable React components for a clean, minimalist interface with smooth navigation and accessible design.

Technical Skills

Languages: C++, Python Java, JavaScript, SQL
Frameworks/Libraries: React, NextJS, Express, JUnit, NodeJS, Tailwind CSS,
Databases: MongoDB, MySQL, PostgreSQL
Tools & Platforms: Git, OpenGL, GLTF, VS Code, Visual Studio, Postman, JIRA

NAH