Simon Ashton

778-917-9843 | simon@smntic.dev | 🛅 linkedin.com/in/simon-ashton | 🞧 github.com/smntic

EDUCATION

Simon Fraser University

Burnaby, BC

Bachelor of Science in Computer Science - 4.16 GPA

Sept. 2024 - April 2030

• Competitive programming club (core member).

Competitions

Top Competitive Programmer

Oct. 2022 - Present

- Candidate Master on Codeforces (top 2.9%).
- 5-Star on CodeChef (top 0.9%).

SFU MASH Programming Contest Winner

March 2025

- Used Kruskall's algorithm to efficiently find the MST of a trade network in $\mathcal{O}(n^2)$.
- Wrote the only correct solution to Dijkstra problem (identified test data flaw post-contest).
- Placed 1st among 20 teams.

DreamHacks Winner

March 2025

- Simulated n-body force interactions in $\mathcal{O}(n^2)$ from scratch in three.js.
- Collaborated with 3D graphics specialist to produce immersive dream-like visuals.
- Won "First Light Award" (top prize) from 26 teams.

PROJECTS

SynthScript $\mid C++, doctest, GitHub Actions$

Dec. 2023 - Oct. 2024

- Self-learned programming language design in 2 months.
- Implemented scripting language with recursive descent parser and AST interpreter.
- Unit-tested in 9 development environments with GitHub Actions.

cp-tool | Python, GitHub Actions, PyPI

Aug. 2023 - Jan. 2025

- Built CLI to automate competitive programming setup, saving 10+ seconds per problem.
- Implemented GitHub Actions pipeline for automatic PyPI releases.

OPEN SOURCE

Godot Engine Contributor $\mid C++, doctest$

March 2024 - Sept. 2024

- Navigated 1M+ LOC codebase to diagnose and fix text editor edge cases.
- Added regression tests covering 7 edge cases to prevent future failures.
- Collaborated with core maintainers to ensure correct implementation.

TECHNICAL SKILLS

Languages: C++, Python (Advanced) — JavaScript (Intermediate) **Systems**: Linux (NixOS, Arch), Git, CI/CD (GitHub Actions)

Algorithms: Graph Theory, Dynamic Programming, Network Flows, Optimization