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Summary

Passionate Computer Science junior with **8 years** of self-driven software projects, ranging from game tools to systems-level utilities. Expert in C++ and performance-tuned algorithms, strong skills in SDLC, unit/integration testing, and reverse engineering. Seeking **Summer 2026** Software Engineering internship (systems/infra or full-stack) to apply my deep technical expertise.

Education

- University of Washington, Tacoma, WA • B.S. Computer Science (Spring 2026)

Relevant Coursework

- Programming Principles (TCSS 142), OOP (TCSS 143), Data Structures & Algorithms (TCSS 342)
- Design & Analysis of Algorithms (TCSS 343), Software Development & QA Techniques (TCSS 360; 4.0 GPA)
- Computer Architecture & Machine Organization (TCSS 371/372)

Computer Skills

Programming Languages	C/C++, Python, Java, TypeScript /
Frameworks & Libraries	Next.js (RSC/Edge), React, Tailwind CSS, Prisma, PostgresQL, Qt/PyQt
Tools & Platforms	Git/GitHub, GitHub Actions (CI/CD), Cloudflare (Pages/Workers, DNS/WAF), JetBrains IDEs, VS Code, Ghidra, Intel VTune, Windows • Linux • macOS
Core Concepts	Data Structures & Algorithms, Concurrency, Reverse Engineering, Memory Management / RAII, Performance Optimization
Networking & Protocols	TCP/IP, SSH, FTP, HTTP, Putty, Windows Server
Analytics & SEO	GA4, on-page SEO, structured data (JSON-LD), Lighthouse perf tuning

Software Projects

1. Mindbender Solver • https://github.com/zugebot/Mindbender-Solver
- Built a high-performance solver for PopCap's 6×6 Chuzzle's "Mind Bender" puzzle
- Implemented DFS, BFS & bidirectional search with custom pruning; achieved sub-second solve times
- Repo contains large report detailing benchmarks and heuristics

2. Minecraft Console Save Editor / Converter • https://github.com/zugebot/LegacyEditor (GitHub ★ 36)
- Reverse-engineered console-specific save formats (PS3, PS4, PSVita, Wii U, Switch, Xbox 360/One)
- Research into proprietary formats, many hundreds of hours of code analysis
- Documented format specs and workflows to streamline future maintenance and community contribution

3. Minecraft Console Terrain Generator / Seed Finder • https://github.com/UtterEvergreen1/LegacyCubiomes
- Recreated full world-generation pipeline (noise, biomes, structures) in C++ (with UtterEvergreen1)
- Reverse-engineered Java ref and Wii U binaries via Ghidra to ensure parity across platforms
- Optimized data structures and algorithms for substantial performance gains in both speed and memory usage
- Collaborated with a co-developer to orchestrate feature design, code reviews, and Git-based version control

Work Experience

Wyoming Trust Attorneys (Law Firm) • Software Developer (Contract) • Casper, WY • Jul 2025–Present
- Building a **Matter Tracker** portal (Next.js/TS, Prisma/Postgres, Cloudflare DNS/WAF + GitHub Actions CI/CD)
- Organic clicks (~3×), improved key rankings (~#40 → ~#10), via perf tuning + on-page SEO over 3 months
- Translated attorney workflows into features (docs, tasks, notifications) with safe Prisma migrations

Achievements

Outstanding Technology Award • Issued by Curtis High School (Received 2022, Senior Year)
- Awarded for showing exceptional potential in CS for creativity & rapid learning. Only recipient in class of 400+.