

# Robert Morelli

[github.com/robertmorelli ↗](https://github.com/robertmorelli)

385 315 0034

robertondino@outlook.com

<b>Education</b>	<b>B.S. Computer Science • University of Utah</b>	<b>expected 2027</b>
<b>Skills</b>	<b>Proficient</b> Dart, JS, CSS, SVG, HTML, Java, Python, TS, Typst, GitHub Actions, Zig <b>Familiar</b> Angular, Bash, C, C#, Cordova, C++, CICD, CircleCI, Flutter, Metal, MongoDB, MIPS asm, OpenCL, PHP, Ruby, Rust, Swift, WASM (WAT)	
<b>Experience</b>	<b>Research Assistant • University of Utah</b> Benchmarking gradual typing in Meta's Cinder variant of python <b>Teaching Assistant • University of Utah</b> Leading labs, grading, assisting students for COMP 1020 <b>Software Engineer/Dev ops • Stutor Inc.</b> Architected automation pipeline Optimized DB indexes, reducing query times by up to 8x <b>Web Developer/Dev Ops • Jerran Software Solutions</b> Overhauled LDS MTC QA/CICD workflow, substantially reducing regression burden Rewrote Embark app startup to reduce first time loading by up to 50% <b>Research Assistant Intern • Earl Keefe PhD</b> Visualizations for anthropology research <b>Web Dev. Intern • Frelii</b> Web scraping SNPedia for AI training	2025– 2025– 2023–2024 2022–2023 2020–2021 2019
<b>Projects</b>	<b>Optimized bead/gravity sort • zig ↗</b> Bead sort via popcount intrinsics and bit matrix transpositions for 32 u5s <b>Tiny nkey rollover tester OS • zig ↗</b> Ported as OS class assignment to zig, demo of keyboard in and vga out <b>Fast approximate change of base • python ↗</b> Novel algorithm for printing numbers larger than $10^{10^5}$ efficiently <b>Automated resume • typst ↗</b> Automated typst resume deployed to website <b>Held-karp • zig ↗</b> Well optimized Held-karp TSP algorithm using bitsets and Gosper's hack <b>Spreadsheet formulas to DLL compiler • c ↗</b> Compiles formulas in a spreadsheet into a DLL <b>Color alchemy • qt c++ ↗</b> Beautiful game for learning color mixing, properly using oklab color space <b>CSS grid examples • css html ↗</b> Reference for common design patterns that should be implemented with css grid <b>Randomized Pacman game • java ↗</b> Pacman game using some algorithms from my 2420 class: A*, DFS, BFS, Union find	2026 2025 2025 2025 2025 2025 2025 2024 2024 2021
<b>Misc</b>	<b>Contributed code field to instruction decoding • MARS IDE ↗</b> <b>#12 Ranked team at Rocky Mountain Regional Contest • ICPC ↗</b> <b>Jane Street Leaderboard</b> Number Cross 5 ↗ <b>Sum One, Somewhere ↗</b>	2025 2025