

EDUCATION

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| M.S. Computer Science | University of Utah | 2025 - 2026 <i>expected</i> |
| B.S. Computer Science, Mathematics Minor | University of Utah | 2021 - 2025 |
| Certificate in Data Science | University of Utah | 2021 - 2025 |

AWARDS & HONORS

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| Grateful Alumni Scholarship | University of Utah | Fall 2024 |
| Kiri Wagstaff AI/ML Scholarship | University of Utah | Fall 2024 |
| Richard B. & Brenda R. Brown Endowed Scholarship | University of Utah | Fall 2024 |
| College of Engineering Departmental Scholarship | University of Utah | Fall 2023, Spring 2024 |
| Dean's List | University of Utah | 2021 - 2025 (<i>all semesters</i>) |

EXPERIENCE

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| Computer Systems Teaching Assistant | University of Utah | January 2026 - Present |
| <ul style="list-style-type: none">Helped over 175 students by managing Piazza discussions, grading assignments, and provided detailed feedback on student submissions.Ran labs and held help hours for students to address questions and clarify concepts. | | |
| Software Practice II Teaching Assistant | University of Utah | August 2023 - May 2025 |
| <ul style="list-style-type: none">Supported over 200 students by managing Piazza discussions, grading assignments, and provided detailed feedback on student submissions.Ran labs and held help hours for students to address questions and clarify concepts. | | |
| GREAT Elementary School Summer Camp Instructor | University of Utah | June 2024 - July 2024 |
| <ul style="list-style-type: none">Taught robotics concepts to elementary students with hands-on activities.Supervised a structured learning environment for children. | | |

PROJECTS

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| Full Stack Photo Sharing App (Capstone Project) - BeThere | C#, React | August 2024 – Present |
| <ul style="list-style-type: none">Developed a backend server with a modular REST API to handle photo uploads, user management, and clustering based on geolocation data.Integrated PostgreSQL for robust data storage with LINQ, and built access control linking users to clusters for selective album visibility by location. | | |
| Full JPL Compiler | C++, Rust | January 2025 – May 2025 |
| <ul style="list-style-type: none">Developed a full compiler for the JPL programming language.Implemented the full pipeline (lexing, parsing, semantic analysis, optimization, codegen) including type checking, scope management, and code optimizations. | | |
| Rust GUI for ELO Media Ratings | Rust ↗ | July 2024 - Present |
| <ul style="list-style-type: none">Implemented an Elo rating system for media ranking and viewing using egui.Added data persistence with spreadsheet output, plus automated image fetching and UI integration for a smoother workflow. | | |
| Path of Memories Gamejam | C# with Unity ↗ | January 2023 |
| <ul style="list-style-type: none">Built a 2D platformer featuring a robust dialogue system, player progression tracking, and character-driven interactions/level design.Added diverse player abilities including wall climbing, double jumping, and dashing. | | |
| Circuit Simulator QT Application | C++ | April 2023 |
| <ul style="list-style-type: none">Designed an educational circuit-logic game with an intuitive, interactive UI and user-customizable gates.Implemented save functionality using JSON for persistent user data. | | |
| LMS Website | C# | April 2023 |
| <ul style="list-style-type: none">Developed a learning management system leveraging a MariaDB backend.Ensured seamless front-end/back-end integration using .NET technologies, including user authentication and course management. | | |
| Sprite Editor QT Application | C++ | March 2023 |
| <ul style="list-style-type: none">Created a comprehensive sprite editor with detailed UI and user interactions.Supported multiple image formats/export options and implemented advanced drawing tools with color manipulation features. | | |
| Snake Network Game | C# | October 2022 – December 2022 |
| <ul style="list-style-type: none">Built a networked snake game with distinct server and client implementations.Managed multiplayer functionality with real-time synchronization. | | |

Misc

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| Advent of Code 2025 | Rust ↗ | December 2025 - January 2026 |
| <ul style="list-style-type: none">Solved 22 challenges focusing on dynamic programming, graph algorithms, and geometric problems.Improved Rust proficiency while implementing efficient data structures/algorithms to optimize solution performance. | | |
| Project Euler | C++, Python | August 2020 – December 2020 |
| <ul style="list-style-type: none">Tackled 59 mathematics and computation-intensive problems.Employed efficient algorithms for large-scale numerical challenges, strengthening mathematical reasoning and coding proficiency. | | |

TECHNOLOGY

Experienced

- C++, Rust, C, C#, SQL, VSCode, Qt, Docker, Linux, MacOS

Proficient

- Python, Java, Latex, Typst, R, Git, MS Visual Studio, MS Office, XCode