

## EDUCATION

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

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

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

## PROJECTS

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

## Misc

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

## TECHNOLOGY

Experienced
<ul style="list-style-type: none"><li>C++, Rust, C, C#, SQL, VSCode, Qt, Docker, Linux, MacOS</li></ul>

**Proficient**

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