Edward Stanford

github.com/edwardstanford7
edwardstanford7@gmail.com
801-651-4982

Education

M.S. Computer Science *University of Utah* 2025 - 2026 *expected*
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 *(all semesters)*

Experience

Computer Systems Teaching Assistant *University of Utah* January 2026 - Present
- 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
- 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
- Taught robotics concepts to elementary students with hands-on activities.
- Supervised a structured learning environment for children.

Projects

Full Stack Photo Sharing App (Capstone Project) - BeThere *C#, React* August 2024 – Present
- 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
- 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
- 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
- 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
- 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
- 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
- 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
- Built a networked snake game with distinct server and client implementations.
- Managed multiplayer functionality with real-time synchronization.

Misc

Advent of Code 2025 *Rust* December 2025 - January 2026
- 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
- 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