Nathan Hutton

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Education

University of Utah Dec. 2025
M.S. Computer Graphics & Data Visualization *GPA: 4.0*

Westminster University May 2024
B.S. Cohputer Science, Minor in Applied Mathematics *GPA: 4.0*
- Awarded outstanding computer science student of the year

Salt Lake Community College May 2021
A.S. General Education *GPA: 4.0*
- Earned degree while in high school

Experience

Software Engineer Intern May 2025 – Aug. 2025
Flight Safety International *Broken Arrow, OK*
- Integrated Phidgets API with RACKtangle hardware for real-time flight simulation I/O in C++
- Collaborated in an AGILE team environment. Worked exlusively in Windows and Visual Studio

Software Engineer Intern Feb. 2023 – May 2024
Idaho National Laboratory *SLC, UT*
- Debug and reformat C++, C, and Python code
- Migrated test harness from MATLAB to Python with Numpy, Scipy, and Pytest, saving thousands in licensing fees
- Configure CI/CD pipelines
- Implement, refactor, and debug GUIs
- Worked exclusively on Linux

Computer Science Tutor/TA Aug. 2022 – Dec. 2023
Westminster University *SLC, UT*

IT Technician Aug. 2021 – May 2024
Westminster University *SLC, UT*
- Resolved hundreds of technical support tickets for network and account issues in Jira
- Trained 6 IT employees on Jira ticketing, Windows, and customer service practices

Projects

Boids Flocking Simulation | *C++, OpenGL, ImGui* GitHub | Video
- A simple ruleset by Craig Reynolds leads to complex flocking behavior

Solar System | *C++, OpenGL, JSON* GitHub | Video
- Dynamic physics, shadow maps, bloom, and verlet numerical integration

Volme Renderer | *C++, OpenGL, Glui* GitHub | Video
- Ray marching in GLSL with modifiable transfer functions

AQI Visualization | Javascript, D3, JSON GitHub | Video
- Interactive visualization for Utah's air quality index
- I made 63% of all commits

Ray Tracer | C++ GitHub
- Reflections, refractions, shadows, bounding volume heirachies, and texture mapping

Squibblets | C#, Unity, Firebase, AGILE GitHub
- 4-person team project. I made the gameplay loop, online leaderboard, UI, and 54% of all commits

Mass Spring System | C++, OpenGL, Eigen GitHub
- Simulate a mass spring system made up of 8,000 tetrahedrons in real time

Technical Skills

Languages: C/C++, Python, Java, C#, JavaScript, HTML/CSS, Latex, SQL
Tools: Linux, Git, Docker, Vim, VS Code, Visual Studio, Windows, Jira
Libraries: OpenGL, NumPy, Pandas, ImGui, Matplotlib, Eigen, Pytorch