Hale Barber

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(801) 664-9153

Education

Academy for Math, Engineering, and Science
Murray, UT, August 2021 - Present

- Expected graduation date: June 2025
- GPA: 4.0
- AP Computer Science A exam score: 5
- Enrolled in Calculus 1 from the U of U
- Enrolled in University of Utah Physics for Scientists and Engineers
- Completed Teaching as a Profession 1

Experience

FIRST Robotics Team Software Lead
April 2023 - Present

- Direct a team of software developers
- Teach incoming team members
- Manage team projects

Code Ninjas Intern
Murray, UT, April 2023 - June 2023

- Taught kids how to program
- Led summer camps

Educators Rising Teacher Created Materials Participant
January 2023 - March 2023

- Created a set of worksheets to explain Object Oriented Programming
- Applied teaching techniques

Projects

Wrm Heart

- Created a procedural, text based, roguelike game in Python
- Designed complex class structures

- Programmed procedural generation algorithms

Derivative Calculator
- Created a program to parse and symbolically calculate derivatives in Java
- Developed recursive object structures
- Designed a recursive parsing algorithm

Relative Faith
- Worked in a team to create a relativistic platformer game in Godot
- Implemented special relativity into the game
- Wrote a shader for relativistic graphics

Flick Chess
- Developing a physics based chess game in Unity
- Worked with the Unity engine
- Created 3D models in Blender

Skills

- Leadership
- Planning
- Communication
- Programming experience in Java, Python, C#, C++, JavaScript, and GodotScript
- Software practice
- Commitment

References available upon request