

# Hale Barber

[halebarber.school@gmail.com](mailto:halebarber.school@gmail.com)

(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
- A (100.8%) in Calculus 1 from the University of Utah, enrolled in Calculus 2
- A (102.7%) in Physics 2210 from the University of Utah, enrolled in Physics 2220
- A in Teaching as a Profession 1

## Experience

### **FIRST Robotics Team Assistant Captain**

#### **March 2024 - Present**

- Direct a team of 40+ members with 16 leadership positions
- Manage team projects
- Won the Dean's List Semifinalist award at the 2024 competition

### **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*