# ASHLEY MAYS

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#### PROJECTS

## Online Piano HTML, CSS, JavaScript, Web Audio API, MediaStream Recording API, VS Code, Git

GitHub

- Created a virtual piano that can be played on all modern browsers on both desktop and mobile devices using responsive web design techniques
- Reduced website loading time to 331ms using asynchronous programming techniques
- Programmed functionality to sustain and soften notes similar to a grand piano as well as four different instrument sound options
- Implemented audio recording capabilities that allow users to play the keyboard, record their playing, and download it as a MP3 file

#### Portfolio Website HTML, CSS, Git, VS Code

GitHub

- Created a custom portfolio website to showcase side projects
- Applied modern web development principles and responsive web design techniques for support on all devices and modern web browsers

### Path Video Game C#, Unity3D, Blender, Visual Studio

GitHub

- Developed a puzzle game based on Hamiltonian paths
- Programmed scene transitions, character movement, sound output, and button functionality
- Implemented and designed 20 unique levels with guaranteed solutions

#### **EXPERIENCE**

## Mathematics and Computer Science Tutor (Seasonal)

CSU Fresno, January - April 2021

- Strengthen students' understanding of advanced mathematical concepts and C++ programming
- Collaborated with team members to develop a plan for outreach that increased student engagement by 10%
- Communicate with team members and students remotely in live virtual sessions via Zoom
- Create and curate educational blog posts on the Fresno State Learning Center's official blog under a strict weekly deadline

## Instructional Student Assistant (Seasonal)

CSU Fresno, August-December 2020

- Lead two mathematics classes of 25+ students remotely in live sessions via Zoom
- Prepare informal lesson plans and create original mathematics problems for students during sessions
- Relay advanced abstract concepts to people with technical and non-technical backgrounds in a timely manner
- Communicate with a supervisor and colleagues to discuss the mathematical content to be presented and taught to students

#### Private Math Tutor

#### Multiple Locations, October 2017 - January 2020

- Strengthen high school students' understanding of mathematics topics and concepts, including algebra and geometry, on a intermittent basis
- Communicate advanced abstract concepts to people with technical and non-technical backgrounds

## **SKILLS**

Languages and Frameworks	C++, HTML,	CSS,	JavaScript,	Latex,	С#

Tools Git, GitHub, Visual Studio, VS Code, Unity3D

Relevant Coursework C++ and Object-Oriented Programming, Data Structures and Algorithms,

Calculus I-III, Real Analysis, Ordinary Differential Equations, Linear Algebra,

Mathematical Proof Writing and Logic

Soft Skills Problem-solving, Communication, Adaptability, Work Ethic, Empathy

## **EDUCATION**