ALEXANDER ADKINS

Software Engineer

CONTACT

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WORK EXPERIENCE

Quidient
Software Engineer

APR 2023 - PRESENT
COLUMBIA, MD

- Led, designed, and developed frontend applications for government contracts using C++ and Python.
- Designed and implemented binary serialization of structured data using protobuf.
- Developed interfacing computer vision applications for machine vision cameras using OpenCV and Spinnaker SDK.
- Designed and implemented a 3D viewport using the VTK toolkit

Code In The Schools
Game Development Instructor

MAY 2021 - DEC 2022
BALTIMORE, MD

- Taught courses on the Unity Game Engine accredited by the University of Baltimore
- Taught after-school Unity game engine courses to teens

SOFTWARE PROJECTS

Explorable Condo: Photogrammetry - LINK

2024

- Imaged a condo and processed images into a 3D mesh
- Imported mesh into Unity and coded a custom player controller in order to explore
- Used public geological survey data to visualize the surrounding region with a point cloud

Shades of Autumn - LINK

2022

- Designed and coded a 3D exploratory game created using the Unity engine with C# scripting
- Coded systems such as a game controller, quest manager, ladder system, movement system, low resolution aesthetic, dialog system (fully scalable scripts to apply to any npc)

Voice Activated Vending Machine - LINK

2022

- Coded a voice-activated vending machine that may be used in Unity Projects
- Used nixon-voxell's custom Unity package UnityNLP in order to train a Naive Bayes classifier model
- Used the trained model in conjunction with the Unity's DictionRecognizer API in order to parse input from a microphone and facilitate an order.

Cannonball the Clown - LINK

2020

- Designed and coded a procedural rouge-like dungeon game.
- Coded a procedural map creation system, along with game controllers and enemy ai scripting
- Handpainted all art assets

SKILLS

Languages

- C++
- Python
- HTML/CSS
- Java
- C#

Toolkits

- Unity
- Unreal
- wxWidgets
- VTK
- OpenCV
- ReactJs
- Open3D
- OpenGL

EDUCATION

University of Maryland, Baltimore County

2018 - 2022

- Bachelor of Computer Science