tobbylie@gmail.com | m.303.638.3964 | https://github.com/tobby-lie

EDUCATION

University of Colorado Denver, Denver, CO

Jan 2017 - May 2021

- Candidate for BS/MS Dual Scholars Program in Computer Science
- Overall GPA: 3.4/4.0, Computer Science GPA: 4.0/4.0

EXPERIENCE

Research Assistant (Data Science/Cyber Security) - University of Colorado Denver

• Fall 2019 - Present

PROJECTS

Multi-Instrument MIDI Generation with RNNs

 Collaborating with a small team, we are experimenting with recurrent neural networks and seeing how they can be trained to learn to generate pieces of music based on existing music files.

Intelligent Augmented Reality Framework

Working closely with university faculty and four other top performing students, we are
working to create a framework that utilizes machine learning, augmented reality and
edge computing to produce an intelligent classification framework for various tasks. The
initial task being bacteria classification.

Paranormal Reality Game

• A mobile iOS game being developed using Unreal Engine 4 and ARKit that implements object occlusion in augmented reality in order to deliver a 'hide and seek' ghost game.

SKILLS

Languages - Python3, C++, Assembly x86, PHP/SQL, Bash, Powerscript O/S - macOS, Windows 10, Linux, Julia, Swift

Software Tools - Visual Studio 2017, Sublime Text, Pycharm, VMWare Fusion, XCode, Unreal Engine 4, Git, Jupyter Notebook, Google Colaboratory, Github, ARKit

Professional - Strong communication, curious learner, detail-oriented, approachable, excellent time management

ACHIEVEMENTS

Undergraduate Research Opportunity Program (UROP) Grant - competitive program designed to financially support research projects for CU Denver Undergraduate students. Approx. 20-40 UROP Full Grant applications awarded each spring semester.