# Alan Munirji

#### **EDUCATION**

#### Masters in Software Engineering - Carnegie Mellon University

August 2022 - December 2023 (Anticipated)

## B.S in Computer Science – University of Pittsburgh

September 2015 - December 2019

- → Minor in Chemistry
- → Overall cGPA: 3.504
- → Computer Science cGPA: 3.71

#### MCAT Exam

August 2019

→ Score: 514 (90th percentile)

#### **EXPERIENCE**

## Junior Software Developer at D'Angelo Technologies – Zelienople, PA

February 2021 - July 2022

- → Worked as a full stack developer for software built on ship simulator for a government client, typically in C#, C++, Python, and JavaScript
- → Managed tasks using a Kanban board, work efforts using the scrum framework, and bitbucket with git for project coordination/maintenance
- → Evaluated various solutions for speech to text (STT) and text to speech functionality, then implemented solutions for both into project, working with Docker, Microsoft STT libraries, UWP, and Vosk STT in the process
- → Wrote and trained a neural regression network to aid in autopiloting ships in a ship simulator (PyTorch)
- → Wrote from scratch both a WinForms and WPF app

## Research Assistant in Robin E. C. Lee's Lab - Pittsburgh, PA

May 2019 - August 2019

- → Developed solo for one of the lab's ongoing projects, working in C++, Java, and Python
- > Participated in hardware development, working with a microcontroller and configuring a circuit board to control a microfluidic chip
- → Wrote an Android app to interface with the microcontroller in Java
- → Worked in a wet lab environment

## PERSONAL PROJECTS

#### What Song Is That? Twitter Bot (2020)

- → Wrote and hosted a twitter bot for both fun and the learning experience on my own raspberry pi server, for a friend's twitter account.
- → Takes requests from users who wish to know what song is playing in a tweet, queuries Shazam's API on their behalf and displays its findings on a website I created for it. It has successfully fielded over a thousand song requests so far
- → Checkout <a href="https://alanmun.github.io/WhatSonglsThat/">https://alanmun.github.io/WhatSonglsThat/</a> for more information

## AutoSage (2021)

- → Wrote a Python app for users of BeatSage, an Al driven service made for the popular VR rhythm game Beat Saber
- → Simplifies and automates the process of using BeatSage for all of the songs the user wishes to play in Beat Saber
- → Updated to be packaged into a Windows executable using PyInstaller for a better user experience, and features a UI built using Tkinter for ease of use

# 3D Interactive Portfolio (2021)

- → Created a portfolio using three.js that shows my personal technological efforts and projects in different worlds belonging to a celestial system in a miniature universe
- → Viewable on my website: <u>alanmunirji.dev</u>

## **TECHNOLOGIES**

- → Python (PyTorch, Numpy, Tkinter, selenium, beautifulsoup)
- **→** C#
- → JavaScript/TypeScript (three.is)
- → C/C++
- → HTML/CSS
- → MongoDB/NoSQL (C++, Compass)
- → Java
- → Swift
- → ActiveMQ (C#, C++)
- → Docker