# **Cameron Dugan**

(603)-703-4018 | duganc@wit.edu | Boston, MA | gitlab.com/cameron.dugan | github.com/camerondugan

#### **EDUCATION**

#### Wentworth Institute of Technology (WIT) | Boston, MA

August 2024

Bachelor of Science in Computer Science Major GPA 3.5/4.0, Overall GPA 3.3/4.0

Dean's List Fall Semester 2021

Related Courses: Machine Learning, Architecture and Al, Algorithms, Intro to Data Science

#### **EXPERIENCE**

### Al Research Assistant | WIT | Hybrid Boston, MA

June 2023 - Present

- Developed a neural network training loop for adversarial Al purposes
- Automated 3D rendering essential for model training

#### Al Research Assistant | WIT & Amazon | Hybrid Boston, MA

January 2023 - April 2023

- Developed Python automations and visualizations for AI model finetuning
- Modified site-packages to setup a Raspberry Pi 4 to run our TensorFlow model
- Orchestrated file synchronization for final Al finetuning tech demo

### ABAP Intern | Charles River Labs | Remote Wilmington MA

June 2022 - August 2022

- Learned and practiced SAP + ABAP Development Methodologies
- Automated email tasks in Microsoft Power Automate

# **Embedded Tutor/Peer Tutor | WIT Success Studio | Boston, MA**January 2022 - May 2022

- Guided over 20 students through Computer Science I, II, and algorithm concepts
- Joined Computer Science II labs to help with in-class assignments
- Directed help sessions for Computer Science I and II

## **PROJECTS**

### Genetic Al Algo | Rust (Individual) | https://gitlab.com/cameron.dugan/genetic-algorithm-in-rust

- Created a simple and clean parallel genetic algorithm in Rust using standard libraries

# **Succulent Multi-platform App | Flutter/Dart (Individual) |** Google Play Store

- Designed plain-text back-end for quick save state editing
- Included a dynamic and smooth card-like interface with Flutter

#### AutoDrop Project | Python (Group) | github.com/camerondugan/AutoDrop

- Developed multi-threaded peer to peer client code for automatic file transfer
- Created a folder structure for incoming files by client to avoid overwriting same named files
- Programmed multi-threaded local network peer discovery

#### Abstract Art Generator | Python (Individual) | camerondugan.com/blog/dream-bot

- Created an image in-painter with basic tangent pixel statistics from a memorized data-set
- Generates tangent pixel probabilities for any given color in an image or set of images
- Wrote code to fill empty pixel given surrounding pixel based on stored probabilities

#### **SKILLS**

**Programming Languages:** Python, C++/C, Java, Rust, Lua, R, Dart, Assembly

Front End Platforms: VR Software in Godot, Desktop & Mobile in Flutter, Desktop GTK4 in Rust

#### **ACTIVITIES**

### AAAI Conference | Artificial Intelligence Conference | Student Presenter

February 2022

- Researched Al's potential impact on Agriculture in Africa

### MIT Battle Code | Programming Competition | Competitor | January in 2020, 2021, 2022, 2023

- Led a team to solve problems such as path-finding and multi-threaded map discovery & communication
- Finished 13th in Finals of 2020 and 18th US Qualifying of 2022

# Boy Scouts of America | Troop 272 | Eagle Scout

August 2020

- Held leadership roles and developed skills for working with and leading teams of young adults
- Led and funded a project to build 4 picnic tables for Sargent Park in Nashua NH