

# Cameron Dugan

(603)-703-4018 | [duganc@wit.edu](mailto:duganc@wit.edu) | Boston, MA | [github.com/camerondugan](https://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 3.4/4.0
- Dean's List Fall Semester 2021
- Related Courses: Machine Learning, Architecture and AI, Algorithms, Intro to Data Science

## EXPERIENCE

### AI Development Intern at Island Exterior Fabricators in Boston, MA Sep 2023 - Dec 2023

- Developed multiple neural networks to adjust label positions in manufacturing drawings
- Automated improved clarity and accuracy of essential manufacturing drawings.

### AI Research Assistant at WIT in Boston, MA Jun 2023 - Sep 2023

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

### AI Research Assistant at WIT & Amazon in Boston, MA Jan 2023 - Apr 2023

- Provided insights that benefited the creation of the Amazon Echo Show 10.
- Developed Python automation and visualizations for AI model fine-tuning
- Modified site-packages to setup a Raspberry Pi 4 to run our TensorFlow model

### ABAP Intern at Charles River Labs in Remote Wilmington MA Jun 2022 - Aug 2022

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

## PROJECTS

### Chess Engine in C# (Individual) | [gitlab.com/cameron.dugan/chess-challenge](https://gitlab.com/cameron.dugan/chess-challenge)

- Implemented a relatively strong chess engine in <150 lines of code
- Used Hamming Weights for bit counting on a bit representation of a chess board.

### Genetic A.I. in Rust (Individual) | [gitlab.com/cameron.dugan/genetic-algorithm-in-rust](https://gitlab.com/cameron.dugan/genetic-algorithm-in-rust)

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

### AutoDrop Project in Python (Group) | [github.com/camerondugan/AutoDrop](https://github.com/camerondugan/AutoDrop)

- Developed multi-threaded peer to peer client 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

### Succulent Multi-platform App in Flutter (Individual) | [Google Play Store](https://play.google.com/store/apps/details?id=com.camerondugan.succulent)

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

## SKILLS

**Favorite Software Tools:** Linux, NixOS, Docker, ssh, tmux, nvim, fzf, zoxide

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

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

## ACTIVITIES

### Participant of VR Jam at Wentworth VR Event July 2023

- Adapted a game I made to run in VR using movement mechanics from Gorilla Tag

### Student Presenter at AAAI Conference February 2022

- Presented research on AI's potential impact on Agriculture in Africa

### Competitor for MIT Battle Code Every January in 2020-2024

- Led a team to solve problems such as low resource path-finding and message communication
- Finished 13th in Finals of 2020 and 18th US Qualifying of 2022

### Eagle Scout of Troop 272 from the Boy Scouts of America 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