Ryan Darcey

rtdarcey@wpi.edu | www.linkedin.com/ryandarcey | ryandarcey.github.io

OBJECTIVE:

Seeking a full time job in computer science and/or game development.

EDUCATION:

Worcester Polytechnic Institute (WPI), Worcester, MA
Bachelor of Science, Computer Science, GPA 3.40/4.0 May 2023
Bachelor of Science, Interactive Media and Game Development Technology, GPA 3.40/4.0 May 2023

Related Courses: Technical Game Development I & II, AI for Interactive Media and Games, Software Engineering, Artificial Intelligence, Machine Learning, Computer Networks, Algorithms, Operating Systems, Webware

SKILLS:

Programming Languages: Python, Java, Rust, Javascript, C#, C, C++
Software: JetBrains IDEs (IntelliJ, PyCharm, etc.), Microsoft Visual Studio, Visual Studio Code, Git, GitHub, Unity, Unreal Engine 4 & 5, Godot 4, Microsoft Office, Google Suite (Docs, Sheets, Slides), Trello, LucidChart

RELEVANT PROJECTS:

Effects of Network Conditions on Cloud Game Streaming Aug. 2022 - May 2023

- Worked in a team of three students researching the effects of latency and jitter on user experience in game streaming systems such as Google Stadia.
- Developed a custom game, Robot Rampage, to test on a simulated network using an open-source game streaming program, ran a user study, and analyzed the gathered data.

Music Genre Classification Spring 2023

- Collaborated in a group of five students making and improving machine learning models to classify clips of music into one of ten genres and to recommend similar songs based on a provided clip.
- Using Python, converted mp3 files to wav files, made mel spectrograms from wav files using the librosa library, trained CNNs on spectrograms to classify clips by genre using TensorFlow Keras.

Planet of the Ants, a Real-Time Strategy Game Mar. - May 2022

- Worked in a five-student group with two artists and three programmers to develop and create a real-time strategy game in Unreal Engine 4. I was primarily responsible for the game's AI system and helped integrate many of the art assets into Unreal Engine.

Pathfinding App for Brigham and Women's Hospital Jan. - Mar. 2021

- Collaborated in a ten-student team in a class competition applying Agile development methodologies and software design patterns in Java to create an indoor pathfinding application, map builder, COVID-screening survey, and integrated service request system for Brigham and Women's Hospital.
- Worked as an assistant-lead software engineer – I was responsible for writing the graph and pathfinding components of the application and was the leader of the algorithms sub-team.

ADDITIONAL EXPERIENCE:

Instructor, iD Tech at Olin College of Engineering, Needham, MA Summer 2023

- Taught students aged 7-17 various topics in programming and game development.

Teaching Assistant, WPI, Worcester, MA Various, 2022 - 2023

- Held office hours to assist students with course material and graded assignments and reports.

ACTIVITIES:

Treasurer, Member, Green Team, WPI Aug. 2021 - May 2023
Violin I, Principal Violin II, Orchestra, WPI Aug. 2019 - May 2023
Violin I & II, Medwin Honors String Quartet, WPI Sept. 2019 - May 2022