

JOHN PETRAKIAN

Portfolio: <https://jopetr.github.io/Portfolio/index.html> ♦ Mobile: (650) 274-4228 ♦ Email: jopetrakian@gmail.com

COMPUTER SCIENCE

Highly motivated software developer seeking a full-time position in software design, development, or testing.

EDUCATION

BS in Computer Sciences – GPA 3.65/4.00

UNIVERSITY OF WISCONSIN-MADISON, MADISON, WI

WORK EXPERIENCE

DREAMWORLD (Y COMBINATOR STARTUP), Redwood City, CA January 2024 - Present

GAME DEVELOPER INTERN: I used Unreal Engine 5 and C++ to implement innovative game features. These include:

- Developing and implementing Geometric Collections for dynamic destructible environments across diverse biomes, optimizing visual realism and gameplay immersion while also setting up spawners for their implementation.
- Resolving critical gameplay inconsistencies, including torch bugs and shield duplication issues.
- Overhauling pet mechanics, resolving compatibility issues and enhancing animation fluidity, significantly improving player interaction and immersion.
- Spearheading the development of an Area Protector Component, enabling customizable area permissions and notifications, enhancing gameplay dynamics and user interaction.
- Implementing innovative solutions for stack splitting, optimizing resource management and inventory usability, contributing to a smoother gameplay experience.

PENINSULA BRIDGE, Atherton, CA Summer 2019

TEACHER: I taught approximately 40 low-income middle school students Science and the fundamentals of Computer Science. I additionally coached water polo and swimming for 50 of the students in the program.

RELEVANT COURSES

Intro to Artificial Intelligence

Assembly Language and C Programming

Intro to Operating Systems

Computer Graphics

Intro to Optimization

C++ for Java Programmers

Discrete Mathematics

Intro to Computer Vision

Probability & Info Theory in Machine Learning

Deep Learning for Comp Vision

Rapid Prototyping

C++ Game Programming

Software Engineering

Algorithms

SKILLS

PROGRAMMING LANGUAGES: Java, Python, C, C#, C++, Matlab, HTML, Julia, & Javascript (with Three.js)

LANGUAGES: native English & native French

GAME ENGINES: Unity & Unreal Engine 5

AWARDS

DEAN'S LIST: Fall 2019, Spring 2020, Spring 2022, and Spring 2023 terms at the University of Wisconsin-Madison

2019 COLLEGIATE WATER POLO ASSOCIATION MEN'S SCHOLAR ATHLETE TEAM (2019): Collegiate Club, Outstanding Tier

PROJECTS

GAME AI: Developed an AI game player for a modified version of the game Teeko using the Minimax algorithm.

PYGAME: Developed a multidirectional shooter arcade game and a side-scrolling runner action game using the Pygame modules for Python.

MUSEO: Collaborated with team members to develop a system where QR codes can be scanned to see custom museum art piece webpages.