

Nathaniel Marquez

nmarquez@andrew.cmu.edu | nathanjmarquez.com | 512-688-9455

EDUCATION

Carnegie Mellon University, School of Computer Science

Pittsburgh, PA

B.S. Artificial Intelligence

Class of 2024

Relevant Coursework: Functional Programming • Cognitive Science and AI • Data Structures & Algorithms in C
Probability Theory • Concepts in AI • Multivariate Calculus • Linear Algebra • Discrete Math

WORK EXPERIENCE

Fanhouse

Remote • Summer 2021

Software Engineer Intern

- Developed full-stack web features for the social media platform which processed over \$2M during my tenure
- Implemented a weighted social graph experienced by over 65,000 users for content recommendation
- Single-handedly trained the neural network for the content moderation of over 30,000 monthly photo uploads ([Github](#))
- Brainstormed marketing and engineering experiments with CEO, CTO, and CMO to increase revenue
- Given \$5000 to successfully lead an experiment to sponsor YouTubers to create video content about Fanhouse

Carnegie Mellon University, School of Computer Science

Pittsburgh, PA • Spring 2021

Teachers Assistant for 15-112: Fundamentals of CS

- Worked on a team of 50 TAs to run a class of 300 students, made up of both undergraduate and graduate students
- Lead recitation of 25 students 3 times a week, graded quizzes/tests, held office hours, and tutored individual students
- Organized an optional lecture with 2 TAs to teach 60 students about game AI, search algorithms, and decision theory
- Judged and ran a school-wide hackathon, Hack112, involving 200+ students

CodeNinjas

Austin, TX • Summer 2020

- Lead weekly summer camps teaching Javascript, Introductory CAD, Digital Modeling, and Minecraft Modding

PROJECTS

WriteAway

August 2021 - Present

- Collaborating with [Christopher Porco](#) to develop a simplistic brainstorming and writing environment
- Currently developing the MVP and planning to ship out by the end of the year for initial user testing

POG PONG ([Devpost](#))

15-112 Term Project • December 2020

- Programmed a 3D pong game using OOP, TkInter, and Carnegie Mellon's MVC framework
- Implemented OpenCV for "camera controls", giving users the option to control the paddle with their hand

Market Spoofing Detection ([Devpost](#))

Citi Bank x CMU • October 2020

- Created an ML classifier with PyCaret to classify "spoofs", orders that illegally influence stock market price

ACTIVITIES

Youtube Channel ([See Here](#))

June 2020 - Present

- Documents my experiences at Carnegie Mellon and gives college application advice
- Edits, shoots, writes, and produces each video, with a total viewership of over 61,000 views

Filipino Student Association

August 2020 - Present

- Promotes the Filipino Community through cultural events, guest lectures, and celebrations

Undergraduate Entrepreneurship Association

August 2020 - Present

- Competes in start-up hackathons, attends networking events, and participates in workshops

HONORS

HSF (Hispanic Scholarship Fund) Scholar and Recipient

August 2020

Future Business Leaders of America Website Design ([Presentation](#))

7th Internationals/1st State • July 2019

SKILLS

Proficient Languages
Python • C • JavaScript • SML

Familiar Languages
C++ • Java • MATLAB

Other Development Skills
React • Node.js • HTML/CSS • Git •
Wireframing • MVC/OOP • TensorFlow