Nathaniel Marquez

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EDUCATION

Carnegie Mellon University, School of Computer Science

B.S. Artificial Intelligence

Pittsburgh, PA Class of 2024

Relevant Coursework: Parallel & Sequential Data Structures/Algorithms • Functional Programming • DS/Algs in C • Al Concepts • Cognitive Science & Al • Probability • Multivariate Calc • Lin Alg • Discrete Math

WORK EXPERIENCE

Meta/Facebook

Menlo Park, CA · Summer 2022

Software Engineer Intern (Upcoming Role)

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

Teacher's Assistant for 07-180: Concepts in Artificial Intelligence (Upcoming Role)

Spring 2022

- Tasked with holding office hours and grading assignments/exams
- Slated to design and implement new weekly recitations into the course structure

Teacher's Assistant for 15-112: Fundamentals of CS

Spring 2021

- 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 guizzes/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

PROJECTS

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 64,000 views

Carnegie Mellon Filipino Student Association

August 2020 - Present

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

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