# Nathaniel Marquez

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## **EDUCATION**

## Carnegie Mellon University, School of Computer Science

Pittsburgh, PA

B.S. Artificial Intelligence • Minor in Innovation and Entrepreneurship

Class of 2024

#### Relevant Coursework

Enrolled Courses: Systems • Functional Programming • Probability Theory • Cognitive Science and Al Previous Courses: Data Structures & Algorithms in C • Python • Concepts in Al • Multivariate Calculus

Linear Algebra • Discrete Math • Social Media

## **SKILLS**

**Proficient Languages** 

Familiar Languages

Other Development Skills

Python • C • JavaScript • SML

C++ • Java • MATI AB React • Node.js • HTML/CSS • Git • Wireframing • Knowledge of MVC/OOP

## **WORK EXPERIENCE**

Fanhouse Remote • Summer 2021

Software Engineer Intern

- Deployed full-stack web features using React and Node.js for the social media platform
- Implemented a weighted social graph for improved content recommendation
- Trained a neural network with Keras to classify posted images that violated community guidelines (Github)
- Brainstormed marketing and engineering experiments with CEO, CFO, and CMO to increase revenue

## Carnegie Mellon University, School of Computer Science

Pittsburgh, PA • Spring 2021

Teachers Assistant for 15-112: Fundamentals of CS

- Lead recitations of ~20 students, assisted with grading, held office hours, and tutored individual students
- Organized and taught an optional lecture about game AI, search algorithms, and basic decision theory
- Judged and ran a school-wide hackathon, Hack112, involving 200+ students

CodeNinjas Austin, TX • Summer 2020

• Lead 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

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

## 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