

# Nathaniel Marquez

512-688-9455 | [nmarquez@andrew.cmu.edu](mailto:nmarquez@andrew.cmu.edu) | [nathanjmarquez.com](http://nathanjmarquez.com)

## Education

### Carnegie Mellon University

Pittsburgh, PA  
School of Computer Science  
B.S. Artificial Intelligence (Intended)  
Minor in Innovation and Entrepreneurship  
Class of 2024 • GPA: 3.55/4.0

## Skills

### Proficient Languages

Python • Java

### Basic Languages

C++ • JavaScript

### Other Development Skills

HTML • CSS • WordPress • Wireframing  
• Knowledge of MVC and OOP • Git

## Relevant Coursework

**15122:** Principles of Imperative Computation

**07180:** Concepts in AI

**21259:** Calculus in 3-D

**15112:** Fundamentals of Programming and Computer Science

**21241:** Matrices and Linear Transformations

**15151:** Mathematical Foundations of Computer Science

## Honors

Hispanic Scholarship Fund  
Aug 2020

Future Business Leaders of America Website Design  
7th Internationals/1st State • July 2019  
(See Projects).

University Interscholastic League Number Sense  
1st Team/3rd Individual  
Virtual State Meet • April 2019

## Projects

### POG PONG ([Devpost](#))

Carnegie Mellon 15-112 Term Project • December 2020  
Programmed a 3D ping pong game using TkInter and CMU's MVC framework. Used OpenCV for "camera controls", which gives users the option to control the paddle with their hand.

### StudyBuddy ([Devpost](#))

Hack112 x CMU 24 Hour Hackathon • November 2020  
Created a personal study analytics app that leverages computer vision and machine learning to help students study more effectively.

### Market Spoofing Detection ([Devpost](#))

Citi Bank x CMU • October 2020  
Created a machine learning classifier with PyCaret to classify "spoofs", orders in the stock market that illegally influence the market price.

### Accuracy Accounting Website ([Presentation](#))

Future Business Leaders of America Website Design • July 2019  
Used Wordpress, jQuery, and HTML/CSS to develop a fully responsive and dynamic website for an accounting company. (See Honors)

## Volunteer and Work Experience

### Carnegie Mellon University, School of Computer Science

15-112: Fundamentals of Programming & Computer Science Teachers Assistant • Spring 2021  
Leads recitations of ~20 students, assists with grading, and planning a school wide hackathon, Hack112, involving 200+ students.

### CodeNinjas

Sensei • Summer 2020 • Austin, TX  
Taught basic Javascript and ran summer camps about Introductory CAD, Digital Modeling and other various STEM topics.

## Activities

### Youtube Channel ([See Here](#))

Vlogs my experiences at CMU and gives college application advice.

### Carnegie Mellon Filipino Student Association

Member • August 2020 - Present  
Helps promote the Filipino Community through cultural events, guest lectures, and celebrations.

### Universal Interscholastic League Number Sense

Team Captain • 2011 - 2020  
Competed in 10 minute, 80 question, mental math tests. (See honors)  
Organized practices with coach, recruited/mentored new members.