

# Michael Nguyen

web: mnguyen.studio | email: mnguyen2@andrew.cmu.edu | cell: 404-395-4347 | Cumming, Georgia

## Work Experience

<b>Teaching Assistant</b> <b>Electrical and Computer Engineering Dept, Carnegie Mellon University</b> Pittsburgh, PA	Spring 2021
<ul style="list-style-type: none"><li>Taught small groups and graded for 18100 Introduction to Electrical/Computer Engineering</li></ul>	
<b>Research Programming Assistant</b> <b>CyLab, Carnegie Mellon University</b> Pittsburgh, PA	Aug 2020 – May 2021
<ul style="list-style-type: none"><li>Developed Alternate Reality systems and 3D georeferenced models under Dr. Yang Cai, using Python, GIS, Blender, and JavaScript</li><li>Used Python and Bash scripting to control Computer Vision models</li><li>Developed Point Cloud Models using Python and JavaScript</li></ul>	
<b>Robotics Instructor</b> <b>Genius Hangouts</b> Cumming, GA	Nov 2019 – May 2020
<ul style="list-style-type: none"><li>Planned and instructed a class of students in mechatronics and coding</li><li>Provided Coaching for 4 intermediate &amp; 4 beginner robotics teams in local VEX IQ tournaments</li></ul>	
<b>Data Science Research Intern</b> <b>Center for Space Research, UT Austin</b> Austin, TX	Summer 2019
<ul style="list-style-type: none"><li>Developed Python scripts to handle data from the ICESat-1 and ICESat-2 Satellite missions and create two dimensional and three-dimensional graphs</li><li>Used GIS tools to create maps using data from the 2000 Shuttle Radar Topography Mission</li><li>Presented at MIT Undergraduate Research Conference 2020</li></ul>	

## Projects

<b>Electronics Design Researcher</b> <b>Central Processing Unit, Single Event Effects Prediction</b> Cumming, GA	Nov 2019 – May 2020
<ul style="list-style-type: none"><li>Investigated the possible correlation between CPU complexity and Single Event Effect (SEE's) from Ionizing Radiation in Spaceflight</li><li>Investigated the relationship between Computer Architecture and Single Event Effects, and their influence on errors</li><li>Won U.S. Air Force Achievement Award at Georgia Science and Engineering Fair and 1st place at the Regional Science Fair</li></ul>	

## Education

<b>Carnegie Mellon University</b> Pittsburgh, PA	Aug 2020 – May 2023
Bachelor of Science, Electrical and Computer Engineering	
Minor, Intelligent Environments	

## Relevant Coursework

Computer Science: Computer Vision, Imperative Computation  
EE/CompE: Digital Systems Design  
Nontechnical: Linear Algebra, Multivariable Calculus, Math Proofs, Global Business

## Leadership

<b>Project Advisor/Teaching Assistant</b> , Project Ignite, Carnegie Mellon University	Oct 2020
<b>CMU Explorers (Outdoors/Climbing Club) Member</b> , Carnegie Mellon University	Oct 2020

## Skills

**Hardware:** SystemVerilog, Verilog, Intel Quartus, Altera FPGA (Cyclone V)  
**Programming Languages:** C, C++, Java, Python  
**Robotics Technologies:** Computer Vision, Machine Learning  
**Software:** Git, MS Office, Google Colab, SolidWorks, MatLab, Linux Command Line  
**Manufacturing:** CNC Mill, 3D printers, Soldering, Breadboard

## Notable Awards

Eagle Scout: Silver, Gold and Bronze Palms	Jan 2019
VEX Robotics State Champion (2020)	Feb 2020
4 <sup>th</sup> Place Technology Division at VEX Robotics World Championship	Apr 2019
1 <sup>st</sup> Place Software Development - GA Technology Student Association	Mar 2018
1 <sup>st</sup> Place Electrical Applications - GA Technology Student Association	May 2019