Michael Nguyen

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Work Experience

Teaching Assistant	Spring 2021

Electrical and Computer Engineering Dept, Carnegie Mellon University Pittsburgh, PA
- Lead small groups and office hours for 18100 Introduction to Electrical/Computer Engineering

Research Programming Assistant	Aug 2020 – May 2021

CyLab, Carnegie Mellon University Pittsburgh, PA
- Developed Alternate Reality systems and 3D georeferenced models under Dr. Yang Cai, using Python, GIS, Blender, and JavaScript

Robotics Instructor	Nov 2019 – May 2020

Genius Hangouts Cumming, GA
- Planned and instructed a class of students in mechatronics and coding
- Provided Coaching for 4 intermediate & 4 beginner robotics teams in local VEX IQ tournaments

Data Science Research Intern	Summer 2019

Center for Space Research, UT Austin Austin, TX
- Developed Python scripts to handle data from the ICESat-1 and ICESat-2 Satellite missions and create two dimensional and three-dimensional graphs
- Used GIS tools to create maps using data from the 2000 Shuttle Radar Topography Mission
- Presented at MIT Undergraduate Research Conference 2020

Projects

Electronics Design Researcher	Nov 2019 – May 2020

Central Processing Unit, Single Event Effects Prediction Cumming, GA
- Investigated the possible correlation between CPU complexity and Single Event Effect (SEE's) from Ionizing Radiation in Spaceflight
- Determined CPU architecture has a greater impact on vulnerability to SEE's relative to transistor geometry
- Won U.S. Air Force Achievement Award at Georgia Science and Engineering Fair and 1st place at the Regional Science Fair

Education

Carnegie Mellon University Pittsburgh, PA	Aug 2020 – May 2023

Bachelor of Science, Electrical and Computer Engineering
Minor: Intelligent Environments

Relevant Coursework

Computer Science: Computer Vision, Imperative Computation, Fundamentals of Programming
EE/CompE: Digital Systems Design, Intro to Electrical and Computer Engineering
Nontechnical: Linear Algebra, Multivariable Calculus, Concepts of Math, Global Business

Leadership

Project Advisor/Teaching Assistant, Project Ignite, Carnegie Mellon University	Oct 2020
CMU Explorers (Outdoors/Climbing Club) Member, Carnegie Mellon University	Oct 2020
VEX Robotics Team Captain, South Forsyth High School	Aug 2016 – May 2020
Physics Team Captain, South Forsyth High School	Aug 2018 – May 2019

Skills

Programming Languages: C/C++, Java, Python
Robotics Technologies: Computer Vision, Machine Learning
Software: Git, MS Office, Google Colab, SolidWorks, Autodesk CAD
Manufacturing: CNC Mill, 3D printers, Soldering, Breadboard
Safety: CPR and AED (Red Cross Certified 2017)

Notable Awards

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