

Emery Gabriel Gonzales Mangona

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Education

Bachelor of Science in Physics
Old Dominion University
Thesis Advisor: Dr. Perry Nerem
Minor: Mathematics

Aug 2016 – Dec 2020

Skills

MATLAB (>3 years)
LaTeX Typesetting (>3 years)
Auto Repair and Maintenance (>5 years)

HTML5 (>1 year)
CSS3 (>1 year)
JavaScript (>1 year)
C++ (<1 year)

Communication
Collaboration
Organization

Industry Experience

Old Dominion University Research Foundation

Particle Physics Lab Member under Dr. Lawrence Weinstein

2018-2018

My responsibilities as a lab/research member included assisting in the build, maintenance, data collection, and execution of time-of-flight experiments, using scintillators, light guides, and photomultipliers.

Geophysics Research Assistant for Dr. Hans-Peter Plag

2017-2018

My responsibilities as a research assistant included literature reviews, compiling documents and media pertaining to Caribbean Sustainable Development Goals. I greatly increased a library of credible literature about Sustainable Development Goals to educate the public and assist in future research.

Individual Pursuits

Codecademy

Frontend Engineer

2020-ongoing

After learning programming languages such as C++ and MATLAB through various undergraduate courses, I grew a passion for it leading to certification pursuits in HTML5, CSS3, JavaScript and frameworks and libraries such as React.js and Redux.js.

Old Dominion University Independent Research

Capstone Thesis

2020-2020

Experimentation for departmental thesis inspired by Hamiltonian Monodromy. As a member of the research team for Dr. Perry Nerem, I was primarily tasked with analytically and computationally creating a light pipe that forces rays to have specific topology on exit.

MATLAB Training

2018-2020

Over the course of my degree, I have obtained 3 years of training in MATLAB to prepare for supervised research and a capstone thesis in the physics department at Old Dominion University.

Lab/Research Assistant

2016-2020

I have participated in research projects of multiple professors and labs at Old Dominion University. Extensive training in MATLAB, LaTeX, and various computer programming languages were developed.