Mark Van Selous

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Education

University of Maryland, College Park, MD

B.S., Physics and B.S., Mathematics (Double Major)

Two Times Angelo Bardasis Memorial Scholarship Recipient

President's Scholarship Recipient

Coursework: Complex Analysis, Transform Methods, Probability Theory, Modern Physics.

Graduate Classes: Convex Optimization (Through StanfordOnline)

Professional Experience (visit https://mvanselous.github.io/personal_website/)

Maryland University Training Reactor (MUTR), Simulation Programmer and Technician May 2019 – December 2019

- Programmed an interactive status board for the MUTR and its experimental ports.
- Designed and developed simulations of the MUTR. Most recently the models were applied to a ramp analysis.
- Developed an algorithm and accompanying GUI for calculating control rod worth curves. This has been written into official procedures.
- Experienced in operating and/or repairing fluorometers, spectrophotometers, sodium iodide detectors, neutron meters, ion meters, and geiger counters.
- NRC Trustworthiness and Reliability license: unescorted access to radioactive materials.
- Certificates of Training: Radiation Producing Devices, Materials; UMD Radiation Facilities LINAC.

ISS-CREAM Research Team, Laboratory Assistant October 2018 - February 2019

- Assisted with hardware repairs, and drawing electrical schematics

Technical Skills

Python (Tensorflow, Scikit-learn, Keras, Qiskit, Django, Tkinter)

MATLAB, HTML5, CSS, JavaScript, LaTeX

AutoCAD: Inventor Pro and Fusion 360

3D Printing, Laser Cutting, Soldering

Relevant Experiences

Regular talks and book exchange with Princeton University Prof Peter Meyers

2015 - 2018

American Physical Society (APS)

April 2016 - Present

Society of Physics Students (SPS)

September 2018 - Present

Expected Graduation: May 2022

3.6 GPA

Tournament Chess Player

- Four Time National Champion; Studied with Jon Edwards (former U.S. Correspondence Champion)

General Leadership Experiences

Eagle Scout, Boy Scout Troop 1776, Titusville NJ

April 26, 2018

- Designed and constructed three rabies tables for the Ewing Health Department

Elementary School Chess Program Organizer Founder, Hopewell Valley Central High School Chess Club February 2015 - March 2016

May 2015 - June 2018