

Mark Van Selous

609-613-7338

vanselousmark@gmail.com

Education

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| University of Maryland, College Park, MD | Expected Graduation: May 2022 |
| B.S., Physics and B.S., Mathematics (Double Major) | 3.6 GPA |
| Two Times Angelo Bardasis Memorial Scholarship Recipient | |
| President's Scholarship Recipient | |
| Completed Coursework: Complex Variables, Transform Methods, Introduction to Probability Theory, Electricity and Magnetism Lab, Modern Physics | |
| Graduate Coursework: 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

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

General Leadership Experiences

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| 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 | February 2015 - March 2016 |
| Founder, Hopewell Valley Central High School Chess Club | May 2015 - June 2018 |