**Mark Van Selous**

4800 Berwyn House Rd, Apt. 107 College Park MD, 20740

609-613-7338

vanselousmark@gmail.com

**Education**

University of Maryland, College Park, MD Expected Graduation: May 2022

B.S., Physics and B.S., Mathematics (Double Major) 3.586 GPA

Angelo Bardasis Memorial Scholarship Recipient

President’s Scholarship Recipient

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

**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 (Tkinter, Qiskit, Django, Scikit-learn)

MATLAB, HTML5, CSS, JavaScript, LaTeX, C ++

AutoCAD: Inventor Pro and Fusion 360

3D Printing, Laser Cutting, Soldering

**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

Bear Tavern Saturday Enrichment Program February 2015 - March 2016

* Chess Program Organizer

Founder, Hopewell Valley Central High School Chess Club May 2015 - June 2018

**Relevant Experiences**

Society of Physics Students September 2018 - Present

Terps in Space (Lab Proposal Simulation) September 2018 - December 2018

Tournament Chess Player

* Former Time National Champion; Studied with Jon Edwards (former U.S. Correspondence Champion)