

Nina Mazzearelli

421 E. Market Street Apt. 506 | Indianapolis, IN 46204
nm5jg@virginia.edu | (978) 853-8302

Education

University of Virginia | College of Arts and Science

Charlottesville, VA | Aug. 2015 – May 2017

- Bachelor of Arts in Physics Awarded May 2017

Virginia Community College System

Charlottesville/Alexandria, VA | May 2013 – May 2015

- Associate of Arts Awarded May 2015
- Northern Virginia Community College | GPA: 3.750 | Presidential Scholar | Dean's List
- Piedmont Virginia Community College | GPA: 3.377 | Vice President's List

Experience

High Energy Physics Lab | *Research Assistant*

Charlottesville, VA | May, 2016 – Dec. 2016

- Researched silicon photomultiplier performance for photon detection applications
- Tested prototypes of the Cosmic Ray Veto Shield for the \$271M Mu2e Fermilab experiment
- Communicated experimental results at the American Physical Society Southeastern Section annual meeting

Stratospheric Ballooning Project | *Member*

Charlottesville, VA | Sept. 2015 – Dec. 2015

- Developed a prototype for a NASA ballooning mission to observe solar and astrophysical targets
- Designed 3D printed structural frame and conducted testing of payload thermal behavior
- Programmed Raspberry Pi and Arduino microcomputers to support experimental objectives

Fermi National Accelerator Laboratory | *Intern*

Batavia, IL | May 2015 – Aug. 2015

- Department of Energy sponsored intern for the Center for Particle Astrophysics
- Researched photon detector performance by quantifying the pixel energy resolution
- Improved automated data collection software developed by research collaborators
- Designed and executed experiments, analyzed data, and communicated results via written reports and oral presentations

Involvement

Society of Physics Students | *Member*

Aug. 2015 – May 2017

- Networked with professors and students through talks, research panels, and colloquiums

WXTJ Student Radio | *Operator*

Feb. 2017 – May 2017

- Hosted a 2-hour show on the University of Virginia student radio station

University of Virginia Sustained Dialogue | *Member*

Sept. 2015 – May 2017

- Contributed to student-led discussions of issues of both local and national significance

Madison House at University of Virginia | *Tutor*

Jan. 2016 – May 2016

- Organized and prepared tutoring lessons in math to local 8th grade students

Skills

| C/C++ | Computational Physics | Cryogenic Refrigeration | Customer Service | Data Acquisition | Data Analysis
| Design of Experiment | Electronic Soldering | Excel | French (Proficient) | Java | LabVIEW | Linux | Modeling |
Monte Carlo Simulation | NMR Spectroscopy | Organization | OS X | PowerPoint | Prototyping | Public Speaking
| Python | Radiation Safety | SolidWorks | Teamwork | Technical Support | Technical Writing | Troubleshooting |
Tutoring | Windows 7 | Word | X-Ray Crystallography | 3D Printing |