Antonius Torode

Curriculum vitae

Education

- 2015–2018 **B.S., Physics, Mathematics (Duel Majors)**, *Michigan State University*, East Lansing MI, *GPA* 3.76.
 - Finished all requirements for an undergraduate physics degree and Mathematics degree. Graduating at the end of Summer 2018.
- 2011–2014 **Undergraduate Studies**, *Oakland Community College*, *GPA 3.7*.

 General studies as well as math/sciences up to and including Calculus III, Differential Equations, Engineering Physics II and General Chemistry II (4.0 in all).
- 2008–2011 **High School**, *Clarkston High School*, Clarkston MI, *GPA 4.0 (ACT standards)*. AP Physics, AP Calculus, AP Computer Sciences, CSMTech (3 year advanced math, science and technology program).

Experience

- Summer 2018 LabVIEW Programmer, MICHIGAN STATE UNIVERSITY, East Lansing MI.
 - Programming of experimental data acquisition systems for an advanced lab class at MSU.
 - Created accurate documentation for future developers and users of the LabVIEW programs.
- 2017-Present Undergraduate Research Assistant, NATIONAL SUPERCONDUCTING CYCLOTRON LABORATORY, East Lansing MI.
 - I work in experimental nuclear astrophysics.
 - My primary focus is with scintillator detectors and experimental setups to better understand nucleosynthesis.
 - I also perform calculations and simulations for determining existing detector properties and new detector properties.
- 2016—Present P-A Computing Assistant, MICHIGAN STATE UNIVERSITY, East Lansing MI.
 - I work to manage and maintain the computers and networks for multiple departments at MSU, including Physics & Astronomy, Phisiology, and Microbiology & Molecular Genetics.
 - My responsibilities include fixing any common or difficult problems that may arise while applying my knowledge to maintain or improve efficiency within the department.
- Summer 2016 Physics Teaching Assistant, MICHIGAN STATE UNIVERSITY, East Lansing MI.
 - A weekly tutor and an exam proctor for PHY 232C, an online course taught at Michigan State University.
 - In charge of assisting students in the understanding of concepts and problems via both an online forum and in person.

- 2013–2015 CRLA Certified Math, Physics and Chemistry Tutor, OAKLAND COMMUNITY COLLEGE, Auburn Hills MI.
 - Mathematics lab tutor for fundamental concepts and ideas including but not limited to mathematics, physics and chemistry.

Summer 2013 Condensed Matter Physics Research, Oakland University, Auburn Hills Ml.

- Extensively studied Raman spectroscopy and graphite/graphene under high pressures.
- Performed a Raman spectroscopy experiment on graphene using a diamond anvil cell to achieve high pressures.
- Personally designed and set up resistivity experiments to confirm findings.
- Presented research in a professional and comprehensive manner in front of an audience.

2011–2013 Data Research Analyst, CLRS, INC., Southfield MI.

- Performed Data analysis of different financial markets including the General Motors commercial car market.
- Learned and filled in for other positions when needed, including management duties.
- Performed analysis of economic markets and businesses.
- In depth research of Las Vegas casino populations.
- Analyzed business functionality and efficiency and improved upon them by shortening data verification process.

2010–Present d0sag3-Films, Home Business.

- o d0sag3-Films is a video editing and graphic design title I created.
- Paid projects for Detroit In Focus but also many personal projects.
- Many of my projects can be viewed at https://www.facebook.com/d0sag3 (d0sag3 is spelled with a zero).

Peer Reviewed Publications

Jun 2017 "Exploration of the Quantum Casimir Effect." Student Journal of Physics - International Version - Vol. 6. No. 2. April-June 2017 - Indian Association of Physics Teachers.

Other Publications and Projects

- 2018 "Multiple Integrated Applications (MIA)." Program created for further development of application design. Contains mathematical functions, encryption algorithms, windows key code simulations, a comprehensive workout generation system, and more.
- Oct 2017 "Characterizing a Tape Station and Beta Detector For Radioactive Isotope Beam Experiments." Conference Poster presented at the Fall Meeting of the Division of Nuclear Physics of the American Physical Society
 - 2017 "Generations of Nuclear Activity (GINA)." Program created for performing nuclear decay calculations for a new radioactive transport system at the NSCL.
 - 2017 "Local Operations Listing Agent (LOLA)." Program created for improved efficiency and computer database management at MSU.
- May 2017 "The Antonius Cookbook." Self Published: Free culinary cookbook download. https://msu.edu/~torodean/ACookbook.html

Nov 2016 "Antonius' Handbook." Comprehensive reference of useful formulas, constants, units and definitions. Self Published: Free book download for current version. https://msu.edu/~torodean/AHandbook.html

Computer skills

Basic PHP, MAC OS

Intermediate Linux, JAVA, GIT, BASH HTML, CSS, CAD, LATEX, C++, C#, Python, DS9, to Advanced Stellarium, OpenOffice products, Microsoft Office products, Microsoft Windows 2000/XP/Vista/7/8/10, Adobe Premiere Pro, Adobe Illustrator, Sony Vegas, Final Cut Studio, Adobe Photoshop, Adobe After Effects, Cygwin Terminal, Qt, GNU/GCC compilation, makefile programming, Computer Hardware and Support, LabVIEW

Honors, Clubs, and Other Affiliations

- 2016-2018 Michigan State University Dean's List
 - 2017 Lawrence W. Hantel Endowed Fellowship Fund, in Memory of Professor Donald J. Montgomery
- 2016-2017 Regular Attendee of Physics, Astronomy, and Karate Clubs at Michigan State University
 - 2015 Member of the Phi Theta Kappa Honor Society
- 2011-2015 Oakland Community College Dean's List
 - 2010 Member of the National Junior Classical League

References

- 2015–Present **Artemis Spyrou**, Associate Professor of Physics, National Superconducting Cyclotron Laboratory, Cyclotron, 640 S Shaw Ln, East Lansing, MI 48824, spyrou@nscl.msu.edu (517)-908-7141.

 Supervisor at NSCL.
- 2015–Present **Esther V. V. Reed**, *MSU Information Technologist Departmental Support*, Biomed/Physical Science Building: 567 Wilson Road, Room 1209, East Lansing, MI 48824, reed@pa.msu.edu (517)-884-5469.

 Supervisor at Michigan State University.
 - 2013–2015 Michael Robinson, OCC Faculty, 739 S Washington Ave, Royal Oak, MI 48067, mdrobins@oaklandcc.edu (248)-232-4438.
 Employer at Oakland Community College.
 - 2011–2013 **Mitch Kanaan**, *CLRS*, *inc. President/Owner*, 29433 Southfield Road, Suite 106 Southfield, Michigan 48076, mkanaan@clrsinc.com (248)-760-5316. Employer at CLRS, Inc.