

Antonius Torode

<https://torodean.github.io>

Education

- 2018–2019 **Degree in Biblical Studies**, *Ambassador Bible College*, Milford OH.
Religious studies pertaining to the history and contents of the Bible and other religions.
- 2015–2018 **B.S., Physics, Mathematics (Dual Majors)**, *Michigan State University*, East Lansing MI.
Graduated with an undergraduate physics degree and mathematics degree.
- 2011–2014 **Undergraduate Studies**, *Oakland Community College*.
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.
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 for quantum physics (optical pumping) and superfluidity experiments by integrating National Instruments I/O devices to a computer system.
 - Created accurate documentation for future developers and users of the LabVIEW programs.
- 2017–2018 **Undergraduate Research Assistant**, NATIONAL SUPERCONDUCTING CYCLOTRON LABORATORY, East Lansing MI.
- I worked in experimental nuclear astrophysics.
 - My primary focus was with scintillator detectors and experimental setups to better understand nucleosynthesis. This involved designing, building, and testing detector systems and collecting data using photomultiplier tubes and the NSCL DAQ system.
 - I also performed calculations and simulations written in python and C++ for determining existing detector properties and new detector properties.
- 2016–2018 **P-A Computing Assistant**, MICHIGAN STATE UNIVERSITY, East Lansing MI.
- I worked to manage and maintain the computers and networks for multiple departments at MSU, including Physics & Astronomy, Physiology, and Microbiology & Molecular Genetics.
 - My responsibilities included fixing any common or difficult problems that may arise while applying my knowledge to maintain or improve efficiency within the department. These included problems such as setting up new experimental camera systems, restoring corrupted operating system files, recovering lost data, replacing damaged hardware, troubleshooting malfunctioning software and more.

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- 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 MI.
- 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.
- 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://torodean.github.io/D3F>.

Peer Reviewed Publications

- Jan 2018 "Software Development to Determine the Optimal Parameters of a Tape Transport System." Student Journal of Physics - International Version - Vol. 7. No. 1. Jan-March 2018 - Indian Association of Physics Teachers.
- 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, 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://torodean.github.io/ACookbook.html>
- Nov 2016 "Antonius' Handbook." Comprehensive reference of useful formulas, constants, units and definitions. Self Published: Free book download for current version. <https://torodean.github.io/AHandbook.html>

Computer skills

- Basic PHP, MAC OS
- Intermediate to Advanced Linux, JAVA, GIT, BASH, HTML, CSS, CAD, \LaTeX , C++, C#, Python, DS9, 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

- 2017–2018 **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.
- 2016–2018 **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.