












# Matthew Durbin, Ph.D. Candidate

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## Education

- 2017 – 2022     **Ph.D. Nuclear Engineering, The Pennsylvania State University**  
*Ken and Mary Alice Lindquist Department of Nuclear Engineering*
- 2013 – 2017     **B.S. Physics, The University of Texas at Austin**  
*Department of Physics*



## Experience

- 2017 – . . . .     **Graduate Assistant, The Pennsylvania State University**  
*Ken and Mary Alice Lindquist Department of Nuclear Engineering*  
Research: Radiation detection and machine learning applications for nuclear safeguards and security  
Teaching Assistant: Radiation Detection and Measurements Laboratory Course
- 2015 – 2017     **Undergraduate Assistant, The University of Texas at Austin**  
*Nuclear Engineering Teaching Laboratory*  
Research: Radiation detection and nuclear forensics  
Teaching Assistant: Health Physics Laboratory Course
- Summer 2016     **Medical Physics Intern, The University of Texas Medical Branch**  
*Department of Radiation Oncology, Physics Division*

## Honors and Awards

- Fellowship     **Nuclear Regulatory Commission Graduate Fellowship Program** (2019 – . . . .)
- Scholarship     **Nuclear Regulatory Commission Undergraduate Scholarship** (2015 – 2017)
- Awards     **J. D. Williams Student Paper Award** 2020 Best Poster. **J. D. Williams Student Paper Award** 2019 Division Finalist: Nuclear Security and Physical Protection, **J. D. Williams Student Paper Award** 2019 Division Finalist: Education & Training Student Research Initiative Winner
- Grants     **Valentin T. Jordanov Radiation Instrumentation Travel Grant** (2019), **IEEE NSS-MIC Trainee Grant** (2019, 2020), **PSU Global Programs Graduate Student Travel Grant** (2019, Two time recipient)
- Honor Societies     **Alpha Nu Sigma - Nuclear Engineering Honor Society, Sigma Pi Sigma - Physics Honor Society**

## Skills

- Coding     Python (NumPy, pandas, SciPy, matplotlib, SQLite, scikit-learn, TensorFlow), SQL, Matlab, MS Excel,  $\text{\LaTeX}$ , MCNP (PTRAC, VisEd), Arduino
- Technical     Gamma ray spectroscopy, data acquisition/analysis/visualization, machine learning, typesetting, teaching