

Edward Gheorghita
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Profile	Current senior at Belmont University. Research interests include utilizing quantum metrology to further push the SQL for applications such as gravitational wave detection, spin noise spectroscopy, and ultralight dark matter detection.	
Education	Belmont University Pursuing Bachelor of Science, Engineering Physics Expected Graduation: May 2021 GPA: 3.72	Nashville, TN Aug. 2017 - Present
Relevant Experience	Oak Ridge National Laboratory ORISE Science Undergraduate Laboratory Internship Dr. Raphael Pooser, Dr. Benjamin Lawrie, <i>Quantum Sensing for Ultralight Dark Matter Detection</i> <ul style="list-style-type: none">Utilize two-mode squeezing from a truncated nonlinear interferometer to improve sensitivity of an ultralight dark matter accelerometerDevelop a phase lock loop for a dual homodyne detector Belmont University Undergraduate Research Dr. Thomas Spence, <i>A Cost-Effective Device for Sensitive Detection of Heavy Metal Ions</i> <ul style="list-style-type: none">Optimization of a micro-controlled potentiostatUtilizing square wave voltammetry to detect Pb^{2+} ions below 100 ppb with total bill of materials below \$75Poster presentation at SURFS Symposium Belmont University Undergraduate Research Dr. Bill Hooper, <i>Error Analysis of Orbital Motion</i> <ul style="list-style-type: none">Programmed simulation of planetary motion through 4th Order Runge-Kutta MethodPoster presentation at Science Undergraduate Research Symposium (SURS) Belmont University Laboratory Assistant Dr. Steve Robinson, <i>Electronics and Circuit Theory Lab</i> <ul style="list-style-type: none">Assist students when they would come across problems in their circuit design (15-25 students per classroom)	
		Oak Ridge, TN June 2020 – Aug. 2020
		Nashville, TN June 2019 – Present
		Nashville, TN Sep. 2019 – Dec. 2019
		Nashville, TN Aug. 2018 – Dec. 2019
Honors	Dean's List	2018 - Present
Community Involvement	Adventure Science Center Volunteer National Science Teaching Association Club Officer	2018 - Present May 2019 - Present