

Experience

Great Lakes Science Center, Cleveland, Ohio

Exhibits & Electronics Technician, October 2024–August 2025

- Independently designed and programmed three computer-based exhibits for the GLSC's summer 2025 *Steam & Steel* gallery
- Troubleshoot, repaired, and updated electronic and computer components of interactive science exhibits throughout the museum galleries
- Assisted with design and fabrication of new permanent and temporary exhibits designed to explain science and history topics to the general public

Guest Engagement Specialist, August 2024 – October 2024

- Facilitated Science Center and NASA Glenn Visitor Center operations, including tours, demonstrations, and workshops
- Engaged guests in conversations about science as they explored the center on their own, as well as guests attending workshops, theatrical shows, scientific demonstrations, and other programming
- Represented the Science Center at off-site programs, including science fairs and community events, communicating knowledgeably about Science Center programs, exhibits, and mission

Baldwin Wallace University, Berea, Ohio

Laboratory and Machine Shop Assistant, January 2024 – May 2024

- Worked closely with BWU's Laboratory Technician to outfit the university's Raman Spectrometer with entirely new electronic components
- Assisted with laboratory maintenance tasks for BWU's biology, chemistry, and physics laboratory spaces as well as building maintenance tasks related to electronics and carpentry
- Developed technical skills including the use of machining equipment like the lathe, band saw, and drill press, as well as circuit layout and design
- Served as student representative for BWU's fire and emergency safety committee

Teaching Assistant, Electronics and Circuits for Engineers, August 2023 – December 2023

- Assisted with course materials ranging from basic voltage dividers to analog to digital conversion circuits
- Worked individually with students in hands-on circuit-building exercises
- Encouraged understanding of the relevance of course materials in students' future careers

Tutor in Physics, Music History, and Solfege (Ear Training), August 2020 – December 2023

- Encouraged students to seek understanding of topics covered as well as topics beyond the scope of their classes
- Helped students overcome obstacles in their learning of a new skill
- Built relationships with students and guided them in the fulfillment of individualized learning goals
- Worked individually with students and in groups of up to 30 at a variety of skill levels

University of Michigan Department of Physics, Ann Arbor, Michigan

Undergraduate Researcher, REU Intern, June 2023 – August 2023

- Studied neutrino physics in the lab of Dr. Joshua Spitz, a leader in the search for sterile neutrinos
- Worked closely with the IsoDAR sterile neutrino detection experiment's University of Michigan electronics engineer, Jon Ameal

- Used Arduinos to develop mechanisms needed to construct sensitive parts of the particle generator's target sleeve

Baldwin Wallace University Riemenschneider Bach Institute/Department of Physics, Berea, Ohio

Undergraduate Researcher, Gott Scholar, August 2021 – May 2022

- Analyzed and modeled the sound of modern and historical low-range string instruments using up-to-date practices in acoustical physics, guided by Dr. Peter Hoejke, Baldwin Wallace Department of Physics
- Explored the technique of playing low-range string instruments from the late Renaissance to the present day using primary and secondary source texts and experience playing viola da gamba and cello
- Examined the role of bass instruments in music over time through score and text study
- Presented findings in a lecture recital as part of the 2022 Baldwin Wallace Bach Festival, as well as at the BWU 2021 Winter STEM Showcase and Baldwin Wallace University's 2022 Student Ovation

Education

Baldwin Wallace University, Berea, Ohio

Bachelor of Science in Physics, May 2024

Honors: *summa cum laude*

Bachelor of Music in Cello Performance, May 2024

Honors: *summa cum laude*

Relevant Coursework: Advanced laboratory courses in Modern Physics and Optics; Advanced lecture courses in Electromagnetism, Classical Mechanics, and Quantum Mechanics; Advanced mathematics courses in Differential Equations and Linear Algebra; Electronic Instrumentation; Independent Study in String Instrument Acoustics; Mathematical Methods in Physics; Computational Physics

Academic Honors: Baldwin Wallace University (BWU) Physics Department Student Teacher of the Year 2022 Award Recipient, Kappa Mu Epsilon Mathematics Honor Society Ohio Gamma Chapter 2022 Inductee, Dayton C. Miller Honor Society 2021 Inductee, Riemenschneider Bach Institute's 2021 Gott Scholarship Recipient, BWU Rahotina Award for Academic Achievement in Physics 2021 Recipient

Additional Training and Skills

- 3 years of experience with MATLAB, C++, Arduino, and LaTeX
- 5 years of experience with Python and HTML
- 10 years of experience with Microsoft Suite applications
- Forklift and scissor lift operation experience
- Suzuki Pedagogy Training – *Every Child Can* and Cello Units 1-2
- Grant writing experience through BWU's Jacket Philanthropy Program
- 14 years of experience as a chamber and collaborative musician