

Colton L. Ashcraft

(740) 590-7266 | ca242521@ohio.edu | <https://www.linkedin.com/in/colton-ashcraft/>

Education

Ohio University | Athens, Ohio

August 2022 - May 2026

Bachelor of Science (BS) degree

Major(s): Applied Physics, Applied Mathematics

Minor(s): Computer Science

Cumulative GPA: 3.26

Experience

Nanoscale & Quantum Phenomena Institute | Athens, Ohio

Quantum Mechanics Research Assistant

May 2024 - Present

- Applied problem-solving skills to overcome research challenges and drive project progress.
- Offered essential support to PhD students in their research endeavors.
- Gained practical exposure to Scanning Tunneling Microscopy (STM) in a research setting.
- Revised an earlier publication, improving its structure and content bringing it to near publication quality.

Thomas Jefferson National Laboratory | Newport News, Virginia

Nuclear Physics Research Analyst

May 2023 – Present

- Developed hands on experience with Physics concepts at a National Lab.
- Analyzed and tested 220 Photomultiplier tubes for Clas12 CEBAF Large Acceptance Spectrometer 12 GeV detector at Jefferson Lab.
- Developed C++ and Linux proficiency, utilizing SSH and Jefferson Lab's "ifarm" computing system.
- Prepared research reports and a presentation of the findings of the research.

Ohio University | Athens, Ohio

STEM Academy lead tutor (student supervisor)

January 2022 – May 2026

- Delivered personalized education via 1:1 and 1:3 tutoring sessions in Physics and Math, tailoring approaches to individual student needs for enhanced student understanding and growth.
- Supervised and oversaw tutoring spaces.
- Conducted regular observations and training of tutoring sessions and provided constructive feedback to tutors.

Leadership Activities and Memberships

Ohio University Bobcats for discovery | Athens, Ohio

President of OUBFD

August 2022 – May 2026

- Co-founded and lead (first as Treasurer, then as President) a community-engaged STEAM organization partnering with the Ohio Valley Museum of Discovery to bring hands-on science programs to Appalachian youth
- Volunteering at the Museum and other related events.

Ohio University | Athens, Ohio

The Maker Movement and STEAMy Projects (HC2905) Teaching Assistant

August 2025 – December 2025

- Guided students from diverse backgrounds through hands-on STEAM projects, providing support in 3D modeling/printing, circuit design, coding, and iterative problem-solving.
- Assisted learners in developing maker-centered skills by teaching tool use, troubleshooting prototypes, and encouraging creativity, collaboration, and independent design thinking.

Honors and Awards

Experiential Learning Award | Athens, Ohio

May 2023

OHIO Excellence Scholarship | Athens, Ohio

August 2022

Technical Skills

Technical: Proficient in C++, Python, Linux environment.

Technical: Skilled in drafting and writing publications.