Audrey Zinn

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EDUCATION

The Ohio State University   Columbus, Ohio
Bachelor of Science - Astronomy and Astrophysics; GPA: 3.83   *Expected May 2023*
Courses: *Quantum Mechanics, E&M, Stellar Evolution, Astronomy Data Analysis, Big Data Analytics, Condensed Matter, Cosmology*

SKILLS SUMMARY

- **Languages:**   Python, C++, Bash, XF macro, LaTeX
- **Soft Skills:**   Leadership, Public Speaking, Time Management, Analytical Thinking, Teamwork, Interpersonal Skills

RESEARCH EXPERIENCE

Professor Amy Connolly   August 2021 - Present
Undergraduate Research Assistant

- : Participated in a project entitled Genetically Evolving Neutrino Telescopes (GENETIS), whose goal is to improve upon radio antenna designs for the Askaryan Radio Array (ARA) to detect ultra-high energy neutrinos
- : Wrote Python and XF macro scripts to select top N individuals for further testing and save images of the CAD models
- : Developed and gave talks to new members for on-boarding, topics including: Big Picture of GENETIS, Understanding Genetic Algorithms, GENETIS and its Projects, and Introduction to our Computers and Software

Professor Kevin Bandura   May 2022 - January 2023
Research Experience for Undergraduates (REU)

- : Worked on analysis of the CHIME Outrigger timing system by testing three types of GPS's: Leo Bodnar GPS, Spectrum Instruments TM-4, and Spectrum Instruments TM-5101
- : Wrote and improved upon an object-oriented Python code for data analysis of raw Analog-to-Digital (ADC) data, outputting information on clock jitter and Allan Deviations
- : Presented conclusions at the 241st American Astronomical Society (AAS) amongst fellow astronomers

WORK EXPERIENCE

The Ohio State University Department of Astronomy   January 2022 - present
Teaching Assistant

- : Ran lab course by giving short lectures, leading discussions, and managing grades of 20 students
- : Held weekly office hours, ran class in professor's absence, and scheduled one-on-one tutoring for students
- : Wrote answer keys for homework assignments and step-by-step tutorial guides for analysis course

The Ohio State University Center for Emergent Materials   November 2021 - present
Student Assistant

- : Helped plan multiple departmental and cross-university events for industry and professional workshops
- : Worked collaboratively with admin team via Microsoft products (Outlook, Teams, Word, PowerPoint, Excel)
- : Monitored CEM REU email, communicating with professors and students, transferred transcripts and letters of recommendation for selection committee

The Ohio State University Department of Astronomy   August 2021 - December 2021
Instructional Assistant

- : Assisted Teaching Assistant in introductory astronomy lab course of 40 students
- : Guided students in weekly labs by asking questions, explaining concepts, and leading discussions
- : Graded lab assignments weekly for 40 students, compiling a list of unclear concepts for followup in lab

Camp Galileo   June 2021 - August 2021
Extended Care Intern

- : Ran program after summer camp for 15 1st and 2nd grade students
- : Developed, organized, and led educational activities for 1st and 2nd grade students in after care program
- : Assisted teachers in classroom engagement and time management throughout camp day

LEADERSHIP AND OUTREACH

- **Scientific Thinkers STEM Outreach**: Ran supplementary science programs at elementary schools in Columbus, Ohio whose populations are comprised of underrepresented or low income students (August 2019 - present)
- **Campus Enrichment Through Astronomy (CETA)**: Engaged with student population at Ohio State, showing them objects in the night sky with a department telescope (August 2022 - present)
- **SciAccess Zenith Mentorship Program**: Blind and low vision student mentorship to promote destigmatization of astronomy as a vision-only field (January - May 2021)

HONORS AND AWARDS

- University Honors Program - 8 semesters
- Dean's List - 7 semesters