
570-666-7343
Rochester, NY
rwb5439@rit.edu

Ryan Butler

EDUCATION

Doctor of Philosophy, Astrophysical Sciences and Technology **August 2023 - 2026 (expected)**
Rochester Institute of Technology

Master of Science, Astrophysical Sciences and Technology **August 2021 - August 2023**
Rochester Institute of Technology

Bachelor of Arts, Physics and Mathematics **August 2017 - May 2021**
Alfred University

RESEARCH EXPERIENCE

Graduate Research Assistant **November 2021 - Present**
Rochester Institute of Technology - School of Physics and Astronomy *Henrietta, NY*

- Utilize data from ESA's Gaia Space Probe to identify candidate nearby, young stars that are attached to loose kinematic associations.
- Assist in the development, feedback, and science usage of a tool built to explore the Gaia data in 3-dimensional space via virtual reality.
- Actively communicate ongoing research findings with advisor and the developer of the aforementioned tool.

Exoplanet Transit Research at Stull Observatory **September 2020 - May 2021**
Alfred University Department of Physics and Astronomy *Alfred, NY*

- Authored the research and health guideline proposal for the transiting exoplanet observations.
- Utilized programs such as MaxIM DL 6 and astroimagej to capture, process, and analyze transit data.
- Presented results at the Alfred University 2021 Undergraduate Research Forum.

OUTREACH EXPERIENCE

AST Imagine RIT Exhibit Coordinator **January 2024 - Present**
Rochester Institute of Technology - School of Physics and Astronomy *Henrietta, NY*

- Lead meetings and planning for the team creating the Astrophysical Science and Technology's large exhibit at ImagineRIT, a campus wide day of outreach for the community surrounding the university.
- Consolidate and submit budget for various projects displayed at the exhibit.

President - RIT Astronomy Club **August 2023 - Present**
Rochester Institute of Technology - School of Physics and Astronomy *Henrietta, NY*

- Plan and execute bi-weekly meetings regarding club events and plans.
- Lead executive board in planning and budgeting for club events and activities.

AST Imagine RIT Exhibit Co-Coordinator **February 2023 - January 2024**
Rochester Institute of Technology - School of Physics and Astronomy *Henrietta, NY*

- Assisted in design and implementation of the Astrophysical Science and Technology's exhibit at Imagine RIT.

Vice President - RIT Astronomy Club*Rochester Institute of Technology - School of Physics and Astronomy***April 2022 - August 2023***Henrietta, NY*

- Assisted with weekly meetings to plan and carry out club affairs and projects.
- Hosted semi-regular observing nights for club members, set up and point telescopes for observations.
- Aid in club administrative duties such as holding a booth at College of Science outreach events.

Stull Observatory Open House Operator*Alfred University Department of Physics and Astronomy***August 2019 - March 2020***Alfred, NY*

- Conducted a weekly open house at Stull Observatory.
- Set up and pointed observatory telescopes at celestial objects for public viewing.
- Gave facility tours of observatory to interested groups.
- Used a small planetarium to give overviews of night sky when conditions precluded telescope operation.

TEACHING EXPERIENCE

Teaching Assistant - Stars and Galaxies & Solar System Lab*Rochester Institute of Technology - School of Physics and Astronomy***January 2022 - May 2022***Henrietta, NY*

- Opened and closed the RIT Observatory telescopes for class observations.
- Assisted students with classwork by answering questions that arose or by aiding them in the operation of astronomical equipment.
- Graded student labs and communicated class performance to the professor.

Grading Assistant - University Physics II*Rochester Institute of Technology - School of Physics and Astronomy***September 2021 - December 2021***Henrietta, NY*

- Graded student assignments and labs and communicated results to the professor.

Teaching Assistant - Elementary Astronomy Lab*Alfred University Department of Physics and Astronomy***January 2020 - May 2021***Alfred, NY*

- Assisted in general telescope operations and opening and closing of facilities at Stull Observatory.
- Aided students in locating celestial objects in observatory telescopes.
- Helped troubleshoot any equipment issues that arose during labs.

Teaching Assistant - General Physics I Lab*Alfred University Department of Physics and Astronomy***August 2019 - December 2019***Alfred, NY*

- Assisted in general lab operations.
- Answered student questions pertaining to lab material.
- Graded all student labs and relayed results to professor.

Supplemental Instructor - Physics I*Alfred University Center for Academic Success***January 2019 - May 2019***Alfred, NY*

- Planned and led several weekly sessions of supplemental course material for a physics I class of 50 students.
- Answered student questions regarding course material in supplemental sessions or via e-mail.

HONORS AND AWARDS

- Chambliss Astronomy Student Achievement Award, The American Astronomical Society 2024
- People's Choice Poster Prize, RIT Graduate Education Week Showcase 2023
- Hal W. Metzger Award in Astronomy, Alfred University 2021
- The Reynolds Prize for Achievement in Mathematics, Alfred University 2021
- Hal W. Metzger Award in Astronomy, Alfred University 2020

TALKS

Probing Nearby Young Moving Group Membership Via Virtual Reality **November 18, 2023**
Fall 2023 Astronomical Society of New York Meeting *Albany, NY*

FIRST AUTHOR POSTERS

A Virtual Reality Based Analysis of the Beta Pictoris Moving Group **January 2024**
24^{3rd} American Astronomical Society Meeting *New Orleans, LA*

An Analysis of the β Pictoris Moving Group via Virtual Reality **November 2023**
4^{9th} Rochester Academy of Science Paper Session *Rochester, NY*

Introducing StarGateVR: a tool for 3D exploration of astronomical data **April 2023**
Graduate Education Week Showcase *Rochester, NY*

Investigating Nearby Young Moving Groups Through Virtual Reality **January 2023**
241st American Astronomical Society Meeting *Seattle, WA*