

YIXUAN SHAO

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EDUCATION

Stony Brook University, Stony Brook, NY

Expected Graduation: May 2024

Bachelor of Science in Physics / Astronomy Planetary Sciences

- **GPA:** 3.77/4.0
- **Related Courses:** Astronomy, Introduction to Planetary Sciences, Mechanics, Thermodynamics, Kinetic Theory and Statistical Mechanics, Quantum Physics, Cosmology, Galaxy, General Relativity, Electronics and Instrumentation Laboratory, Observational Techniques in Astronomy, Data Analysis, Applied Complex Analysis, Nuclear Physics, Python for Scientific Computing

Anhui University, Hefei, Anhui

September 2020 - June 2022

Bachelor of Science in Applied Physics

- **GPA:** 3.79/5.0
- **Related Courses:** Calculus, Applied Linear Algebra, Classical Physics, Modern Physics, Waves and Optics, Electromagnetic Theory, Survey of Probability and Statistics, Computation for Physics and Astronomy.
- **Honors/Awards:** Academic Achievement Award Recipient, Excellent Organizer, Excellent Member

EXPERIENCE

Condor Array Telescope in Prof. Kenneth Lanzetta Group At Stony Brook University

May 2023 - Present

Undergraduate Student Research Member

- Generated and processed XML files based on Condor Array Telescope's existing observational data via Python.
- Screened primarily and secondarily of data based on extensive Photometry.
- Connected filtered pairs of datasets to the online FITS file database, visualized target stellar coordinates based on FITS files via Python to assist in processing error terms in observational data.
- Optimized the usability of the resulting data and improved the database to facilitate more effective observations.

Course AST 443 Observational Techniques in Astronomy

October 2023 - December 2023

Proposal Writer

- Selected observable targets based on the Be Star Database and StarAlt.
- Used Mt.Stony Brook observatory with a 14-inch Meade LX200-ACF telescope, a Mesu-200 German Equatorial Mount, and the DADOS Spectrograph camera to observe the targets.
- Calibrated and analyzed the acquired data via Python and DS9 to produce spectrums of each target.

Measurement Setup in Prof. Xuegang Chen Research Group At Anhui University

June 2021 - September 2021

Program Member

- Created a draft drawing of the target device via CAD.
- Optimized CAD details and created parts based on design drawings.
- Drilled on equipment using modern lathes at the College of Engineering to provide space for subsequent installation of control gear.
- Installed controls and solder wiring to complete fabrication.
- Drew scientific illustrations and covers for Professor based on CAD and C4D.

STUDENT ENGAGEMENT

Office Of Global Affairs, Stony Brook University

August 2022 - Present

Student Assistant

- Dealt with cooperative university agreement.
- Built and modified database of cooperation agreement.
- Designed posters and flyers for international students activities.

Student Union, Anhui University - SBIAHU

April 2021 - May 2022

President

- Organized Institution-level activities.
- Assisted in improving students' study and living environment.

SKILLS

Programming Languages: C++, R, Python, Fortran, Processing

Tools: Skilled application of Microsoft Azure, Microsoft Suite, Adobe Suite, Google Suite, Command Line, Linux, etc.

Language: Fluent in Mandarin, English

Transferable Skills: Leadership, Problem Solving, Interpersonal Communication, Time Management, Collaboration