

DANIEL BABNIGG

5500 S. University Ave., Room 1185
Chicago, IL 60637
708-704-8519
babnigg@uchicago.edu

EDUCATION

The University of Chicago

Bachelor of Science

Prospective Astronomy and Astrophysics Major, with Computer Science and Data Science Minors

Chicago, IL

Expected 2025

Lyons Township High School

Diploma

Honors

National Cyber Scholarship Foundation Cybersecurity Scholarship (2021), LTHS Boosters Leadership Awards (2021), Outstanding Student in Mathematics Award (2021), National AP Scholar (2020)

La Grange, IL

June 2021

RESEARCH EXPERIENCE

The University of Chicago Department of Astronomy and Astrophysics

Glass Plates Student Research Assistant

- assist in the ongoing process of digitizing and providing access to historic materials from Yerkes Observatory, including astronomical glass plates, for scientific and historic research
- gained experience in the process of digitizing photographic and spectra glass plates, from using cameras and scanners to digitize the physical glass plate, to performing quality and statistical inspections, to producing star and galaxy catalogs or calibrated spectra
- use scientific tools and programming like SAOImageDS9 and python to examine or create astrometric, photometric, and/or wavelength calibrated FITS files, along with utilizing public data (Gaia, SDSS, etc.) to compare or refine the produced data from the glass plates
- collaborated with scholars from diverse fields to better understand the historical context and metadata that is relevant to both the scientific and historical legacy of Yerkes Observatory

Chicago, IL

June 2022 – present

CONTRIBUTED PRESENTATIONS and TALKS

Capturing the Stars: The Untold History of Women at Yerkes Observatory Exhibition

[Exhibition Piece](#)

Telescope, constructed according to instructions written by Vera M. Gushee

Chicago, IL

September – December 2023

Alliance of Historic Observatories Meeting at Yerkes Observatory

Conference Session Presentation

A New Look at an Old Enigma: epsilon Aurigae

Williams Bay, WI

October 2023

Biennial History of Astronomy Workshops University of Notre Dame

[Panel Session Presentation](#)

Digitization and Analysis of a Yerkes Observatory Spectroscopic Glass Plate

Notre Dame, IN

June 2023

History of Science Society Annual Meeting[Poster Session Presentation](#)

Chicago, IL

November 2022

Capturing the Stars: Early 20th Century Astronomical Photography and the Material Legacy of Yerkes Observatory

OTHER COMMITMENTS

The University of Chicago Housing & Residence Life

Chicago, IL

*Resident Assistant**2022-23 academic year, 2023-24 academic year*

- develop house community and provide study break activities in a university dormitory for undergraduate students
- support students as an informal counselor for academic and personal matters
- assist in dealing with emergency and issues and concerns, along with mediating conflicts among students

PERSONAL INFORMATION

Languages: English (native), German (conversational)

Computer: advanced python coding knowledge, experience with Java and C. experienced with Windows and Ubuntu OS.