

PIERSON LIPSCHULTZ

Piersonlipschultz@gmail.com ◇ <https://www.piersonl.com/> ◇ 312-292-7673 ◇ GitHub

RESEARCH EXPERIENCE

College of DuPage

Honors Independent Study ◇ GitHub ◇ Publication

Glen Ellyn, IL

1/2025 - 5/2025

- Wrote a paper discussing the processes of mass transfer in binary stars
- Combined observational and simulated data
- Used Python to compare a dataset of a million simulated binaries with their observed counterparts
- Utilized L^AT_EX to allow for greater efficiency
- Published in the Digital Commons

CIERA, Northwestern University

REACH Further ◇ GitHub ◇ Visualizations

Evanston, IL

6/2024 - 7/2024

- Worked with mentor Ilia Kiato assisting with research
- Project one: Researched and cataloged X-ray binary simulation data using python tools.
- Developed a system for analyzing subpopulations using Bokeh and a GitHub Site.
- Project two: Researched natal kick velocities in Black Holes, recreating the results of the paper A Black Hole Kicked At Birth: MAXI J1305-704.
- Created visualizations of the processes of the paper.

EDUCATION

College of DuPage

Honors Scholar

Glen Ellyn, IL

8/2024 - 5/2025

RESEARCH SKILLS

Blender

L^AT_EX

Python

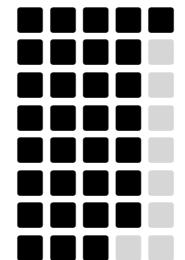
Pandas

Bokeh

Matplotlib

Git

Tinker



OUTREACH

President and Founder, COD Space Club

<https://codspace.club/>

Glen Ellyn, IL

1/2025 - 5/2025

- Grew club to ≈70 members in 2 semesters
- Hosted numerous outreach events including a booth STEMCON
- Observing nights and field trips to places including Fermilab

Lead Ambassador, Stories of Space

<https://www.storiesofspace.com/>

Glen Ellyn, IL

2/2025 - Current

- Leading mission 4
- Helping coordinate large scale collaborations
- Marketed and encouraged college student engagement with space.

Project Head, High Altitude Weather Balloon Collaboration

<https://sites.google.com/view/stories-of-space-project/>

Glen Ellyn, IL

2/2025 - 7/2025

- Helping coordinate large scale collaborations
- Marketed and encouraged college student engagement with space.
- Currently working in charge of Mission 4

TALKS

Guest Speaker, Northwest Suburban Astronomers	Barrington, IL
https://www.nsaclub.org/	2/7/2025
○ Presented an overview of binary star properties, including X-Ray binaries, mass transfer, and stellar evolution	
○ Audience of ≈ 50 people.	

Student Speaker, College of Dupage	Glen Ellyn, IL
COD Library Student Research Symposium	5/12/2025
○ Presented an in-depth exploration of the processes of Mass Transfer in Binary Stars	

PUBLICATIONS

Mass Transfer in Binary Stars	Glen Ellyn, IL
Digital Commons	5/2025
Photography	
Prairie Light Review	

PRESS

Student Spotlight, College of DuPage	Glen Ellyn, IL
https://www.cod.edu/about/stories/students/lipschultz.html	1/2025
STORIES of Space and College of DuPage students . . . weather balloon launch	
Daily Herald	

PROJECTS

{WIP} Python Module for graphing HR diagrams of POSYDON Datasets	
Independent Project ◇ Example ◇ GitHub	5/2025 - Current
○ Allows user to easily create elegant and publishing ready graphs in either Matplotlib or Bokeh	
○ Creates HTML viewing files to allow the user to quickly understand a dataset (see link)	
○ Written for an out-of-the-box solution while still allowing deep configuration	

Custom Astrophotography Mounting Rig

Independent Project ◇ Photos	5/2025 - Current
○ Custom designed in CAD software (Fusion360)	
○ 3D printed in high-strength materials to allow for long-term use	

ART

Astrophotography	
Independent ◇ Photographs	5/2024 - Current
○ Custom assembled rig for taking pictures of faint deep sky objects	
○ Experienced with various AP tools, including NINA, PixInsight, BXT, Siril, PHD2, and more	

Photography

Independent and Academic ◇ Photographs	12/2024 - Current
○ Experienced with Sony and Canon DSLRs	
○ Multiple photographs published	