

Tristan Parmerlee

515.318.2459 | parmerleetr@gmail.com | [linkedin.com/in/tristanparmerlee](https://www.linkedin.com/in/tristanparmerlee) | [tparmerlee.github.io](https://github.com/tparmerlee)

EDUCATION

Loyola University Chicago

Bachelor of Science in Physics with Computer Science and Mathematics – Dean's List

Chicago, IL

Aug. 2024 – Present

Drake University

Bachelor of Science in Physics, Astronomy, and Mathematics – Dean's List

Des Moines, IA

Aug. 2022 – May 2024

RESEARCH EXPERIENCE

Northwestern CIERA REU

Northwestern University

June 2025 – Aug. 2025

Evanston, IL

- Conducted research focused on stellar collisions, dense galactic clusters, and machine learning.
- Participated in multiple career development programs, such as RCTP and Python Workshops.
- Prepared a writing deliverable, website, and poster related to project results.
- Future research ongoing during Fall 2025.

Loyola Undergraduate Research

Loyola University Chicago

Aug. 2024 – Present

Chicago, IL

- Undergraduate research consisting of paper review of introductory cosmology and inflation
- Examining how different inflation models affect the generation of primordial black holes
- Further work supported by Mulcahy Scholarship

MISSFIT Student Research Lead

Drake University

Jan. 2023 – July 2024

Des Moines, IA

- Developed the artificial gravity project for the student-led MISSFIT collaboration
- Designed 3-D printed proof of concept for a new approach to artificial gravity generator
- Organized team schedule and meetings and designated projects to other members
- Assisted in work of other subgroups, such as the computational and biological subgroups

RELEVANT COURSE WORK

Loyola University Chicago

Aug. 2024 – Present

- Freshman Projects, Electronics, Theoretical Mechanics, Electricity and Magnetism, Thermal Physics and Statistical Mechanics, Undergraduate Research
- Introduction to Probability, Introduction to Real Analysis I, Introduction to Complex Analysis, Abstract Algebra
- Introduction to Computing Tools, Introduction to Object-Oriented Programming, Data Structures I and II

Drake University

Aug. 2022 – May 2024

- Introduction to Physics I and II, Modern Physics, Introduction to Methods in Physics, Error Theory, Descript Astronomy, Astronomical Techniques
- Calculus I-IV, Linear Algebra, Ordinary and Partial Differential Equations, Math Reasoning (Discrete Math), Numerical Analysis

AWARDS AND HONORS SOCIETIES

Alpha Sigma Nu Honor Society Induction

Loyola University Chicago, 2025-2026

Rataj Scholarship

Loyola University Chicago, 2025-2026

Loyola University Chicago Mulcahy Scholarship

Loyola University Chicago, 2025-2026

Sigma Pi Sigma (Physics Honor Society)

Loyola University Chicago, 2025

Father Gerst Memorial Award

Loyola University Chicago, 2024-2025

Putnam Competition Rank of 2566 out of 3857

MAA Putnam Competition, 2023

ISGC Undergraduate STEM Research Scholarship

Iowa Space Grant Consortium, 2023-2024

Drake Physics Prize Runner-Up Scholarship

Drake University, 2022-2024

TECHNICAL SKILLS

Languages: Python, Java, C/C++, C#, Fortran, LaTeX, Unix, Red Hat Linux, PyTorch, Scikit-Learn, SLURM

Developer Tools: Git, VS Code, PyCharm, IntelliJ, Slurm

Engineering Tools: Fusion360, UltimakerCura, PrusaSlicer, LTSpice

OUTREACH AND ACTIVITIES

LUC Physics Club President <i>Loyola University Chicago</i> <ul style="list-style-type: none">• President of LUC Physics Club for the 2025-2026 school year.• Organized events for members of the LUC Physics Department.• Volunteered as a physics tutor for 100-level courses.	Aug. 2025 – Present
LUC Mathematics Peer Tutor <i>Loyola University Chicago</i> <ul style="list-style-type: none">• Paid math tutor for the LUC Tutoring Center.• Assisted students with all 100-level courses as well as select 200-level courses.	Aug. 2025 – Present
Loyolacappella <i>Loyola University Chicago</i> <ul style="list-style-type: none">• Member of Loyola University Chicago's Premier All-Voice Acappella group.• Served as Treasurer for the 2025-2026 school year.• Hosted multiple on-campus performances for students.	Aug. 2024 – Present
Brocal Chords <i>Drake University</i> <ul style="list-style-type: none">• Member of Drake University's Premier Low-Voice Acappella group.• Performed at multiple events both on and off campus.	Aug. 2023 – May 2024
Drake University Mathematics Tutor <i>Drake University</i> <ul style="list-style-type: none">• Paid math tutor for the Drake University Math Department.• Completed a preparatory semester-long course before becoming eligible to tutor.• Assisted students in calculus and linear algebra courses.	Jan. 2024 – May 2024
Drake Municipal Observatory Volunteer <i>Drake University</i> <ul style="list-style-type: none">• Volunteer at the Drake Municipal Observatory for weekly public nights.• Set up telescopes for public viewings and provided informational speeches to general public about night sky objects.	Aug. 2022 – May 2024