Alicia M. Chun

EDUCATION _

The University of Chicago

Chicago, IL

Bachelor of Science Computer Science with a specialization in Human-Computer Interaction w/a Minor in Physics

Honors: University Scholar Award (2021), President's Scholar (2021)

Expected, June 2025

RESEARCH EXPERIENCE

University of Hawai'i at Mānoa, Institute for Astronomy

Honolulu, HI

Astrophysics REU Fellow

May 2023 – July 2023

- Determined asteroseismic testing limitations of ground-based transient surveys, ATLAS and ASAS-SN, using space-based telescopes, TESS and Kepler.
- Used testing limitations to find the frequency of maximum value of 10,000+ red giants within TESS's continuous viewing zone and Kepler's field of view.
- Presented research in the TASC7/KASC14 asteroseismology conference.

Subaru Telescope NAOJ—SCExAO

Hilo, HI

Research Intern

- July 2022 September 2022
- Characterized AO3000 deformable mirror (DM), automatized data collection between AO3000 and Zygo interferometer.
- Shared AO3000 findings with ALPAO in France to ensure issues found w/ the DM are fixed.
- Characterized modulator for SCExAO infrared pyramid wavefront sensor, automatized data collection.

TEACHING EXPERIENCE

The University of Chicago—Department of Physics

Chicago, IL

Learning Assistant

September 2023 - Now

• Facilitate labs for the introductory physics sequence courses.

The University of Chicago

Chicago, IL

Core Tutor

September 2023 - Now

• Assist students in the physics 120s, 130s, and honors 140s sequence at The University of Chicago.

Neighborhood Schools Program

Chicago, IL

Tutor

January 2023 - May 2023

• Tutored local elementary to high school students in Math, English, Science, and SAT prep.

Presentations/Talks_____

American Astronomical Society 243rd Meeting

New Orleans, LA

Poster: Testing the Detection Limits of Ground-Based Transient Surveys for Asteroseismology using TESS Data January 2024

Institute for Astronomy, University of Hawai'i, REU Symposium

Honolulu, HI

Talk and Poster: Testing the Detection Limits of Ground-Based Transient Surveys for Asteroseismology using Kepler and TESS Data

July 2023

TASC7/KASC14 Honolulu, HI

Poster: Testing the Detection Limits of Ground-Based Transient Surveys for Asteroseismology using TESS Data July 2023

PUBLICATIONS _____

First Author Papers:

• Alicia Chun, Nicholas Saunders, Dan Huber, Dan Hey. *A completeness function of Ground-Based Transient Surveys for Asteroseismology of M Giants*. (in preparation)

Co-Author Papers

• Julien Lozi, Kyohoon Ahn, Alicia Chun, et. al. AO3000 at Subaru: the facility adaptive optics goes extreme. (in revision)

LEADERSHIP & ACTIVITIES ___

Le Vorris and Vox Circus

Chicago, IL

President & Acrobatics Instructor

March 2022 - Now

- Perform in aerial silks, aerial hoop, and partner acrobatics.
- Direct and write shows with 20+ performers.
- Reserve spaces, costumes, and props with Logan Staff faculty, manage ticketing finances, bridge communication between faculty, performers, and tech staff.
- Organize and teach acrobatic classes to UChicago students and faculty.

UChicago Competitive Traveling Tennis Team

Chicago, IL

Practice Coordinator

July 2022 – September 2022

- Coordinate practice schedules, rent courts, communicate reminders for practice with the rest of the club.
- Travel to neighboring universities to play competitively.

TECHNICAL SKILLS_

Programming Java, C, Python

Languages English, Limited Professional Spanish, Elementary German

Tools Git, VSCode, Lightcurve, Astropy, Pandas, NumPy, Microsoft Excel