

CLARISSA RIZZO CREDIDIO DO O

Astrophysics Graduate Student and NSF Fellow at UC San Diego

@ cdoo@ucsd.edu

+1 (805) 837-9706

San Diego, California

clarissardoo.github.io

EXPERIENCE

Graduate Research Assistant

Center for Astrophysics and Space Sciences (CASS at UCSD)

September 2020–Present

- Advisor: Prof. Quinn Konopacky
- Currently developing a simulation program and using directly imaged Near Infrared Camera 2 (NIRC2) data to analyze the dynamics and stability of the HR-8799 exoplanet system.
- Currently participating in the design and development of the Gemini Planet Imager's (GPI) 2.0 new adaptive optics system.

Test Engineering Intern

Lockheed Martin

Jan – August 2020

- Wrote scripts to automate the testing process of infrared focal plane arrays (FPAs) and used these scripts to test parts.
- Used Object-Oriented programming to automate scripts for analyzing telegraph noise on infrared focal plane arrays.
- Analyzed telegraph noise data on infrared FPAs.

Astrophysics Intern

NASA Jet Propulsion Laboratory

Jun – August 2019

- Worked on PARVI (Palomar Radial Velocity Instrument) under the guidance of Drs. Gautam Vasisht and Christopher Matthews.
- Wrote programs to predict the instrument's photon throughput, and performed photometry and spectrophotometry on data to compare my projections to the actual throughput.
- Performed simulations to analyze how the single-mode fiber optics coupling efficiency changes as we introduce optical aberrations into the system.

Undergraduate Research Assistant

Mazin Lab at UCSB

June 2018– June 2020

- Designed and developed a database for the Mazin Lab, an astrophysics laboratory that uses Microwave Kinetic Inductance Technology to directly image extrasolar planets. The database is a website currently available on the laboratory's server.
- Wrote a program that corrected cosmic ray incidents for the new device developed by the lab (MEC - MKID Exoplanet Camera).
- Performed post-processing (angular differential imaging and spectral differential imaging) and made contrast curves on MEC data.

EDUCATION

Physics, Ph.D.

University of California, San Diego

Expected

Physics, M.S.

University of California, San Diego

Expected: 2022 GPA : 3.95

Physics B.S., Minor in Astronomy/Planetary Science (Honors)

University of California, Santa Barbara

September 2016 – June 2020

SKILLS

Python

MATLAB

HTML

CSS

JavaScript

Git

Flask

Linux

LaTeX

SELECTED AWARDS

- National Science Foundation Graduate Research Fellow (NSF GRFP) 2020
- San Diego Fellowship 2020
- Caltech SURF (Summer Undergraduate Research Fellowship) 2019
- Edison GRE Scholarship 2019
- Edison Summer Research Program Scholarship 2018

PRESENTATIONS

- NASA JPL's Summer Student Talks (August 2019)
- APS Conference for Undergraduate Women in Physics (CUWiP) (January 2019)
- UCSB Undergraduate Research Colloquium (August 2018)

MEMBERSHIPS

- American Physical Society
- Brazilian Student Association (BRASA)