

Ignacio Reyes Valenzuela

BACHELOR OF SCIENCE IN ASTRONOMY

☎ (+56) 9-8912-5492 | ✉ Ignacio.Reyes.ASTRO@gmail.com | 🌐 ignacio-reyes-valenzuela-9440a5269/

Summary

Bachelor of Science, Astronomy mention. With knowledge in Astronomy, Physics, Cosmology, Photonics and Machine Learning. Has worked on a multidisciplinary team in a Astronomy Instrumentation research project. Open to work with team in and outside of Chile. With a respectable knowledge in English. Has the capacity to work on research projects in astronomy. Wants to broaden the professional experience.

Education

Pontificia Universidad Católica de Chile

Macul, Chile

FACULTAD DE INGENIERÍA

2021-2022

- **Diploma**, in Python and Data Science
- (Graduated with distinction)
- E-learning modality

Universidad de Chile

Santiago, Chile

FACULTAD DE CIENCIAS FÍSICAS Y MATEMÁTICAS

2013-2019

- **Bachelor of Sciences**, Astronomy Mention
- (Graduated with Distinction)

Work Experience

Freelancer

Web

FIVERR, UPWORK, FREELANCER

January, 2024 - Actual

- Provided a range of freelance services on multiple online platforms
- Managed portfolio and interacted with clients.

Census Taker

La Florida, Chile

INSTITUTO NACIONAL DE ESTADÍSTICAS

March 2024 - July 2024

- Conducted door-to-door interviews and collected demographic data from households to ensure accurate population counts.
- Explained the purpose and importance of the census to respondents, addressing any questions or concerns.

Research Assistant

Santiago, Chile

LABORATORY OF ASTROPHOTONICS AND TERAHERTZ, UNIVERSIDAD DE CHILE

2018 - 2020

- Assisted in the development and maintenance of the laboratory's thermal control systems, ensuring optimal operating conditions for sensitive experiments.
- Contributed to the implementation of the third receiver system of an heterodyne interferometer.

Research Assistant

Las Condes, Chile

DEPARTMENT OF ASTRONOMY, UNIVERSIDAD DE CHILE

Fall 2019

- Conducted an in-depth analysis of the spectral index in V883 Ori, contributing to the understanding of this celestial object's properties.
- Categorized the viscous infalling of protoplanetary disk

Research assistant

Las Condes, Chile

DEPARTMENT OF ASTRONOMY, UNIVERSIDAD DE CHILE

January 2017

- Power Calibration of MINI Radio Telescope
- GMC345.5+1.0 molecular cloud observations during the month of January
- Analysed the differences between reference and observed data.

Publications

Application limit of the photocentre displacement to fundamental stellar parameters of fast rotators – Illustration on the edge-on fast rotator Regulus

MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY.

2022

- <https://doi.org/10.1093/mnras/stac092>

ACHILLES: AstronomiCal Heterodyne in Infrared-optical with multiapertures

SF2A-2019: PROCEEDINGS OF THE ANNUAL MEETING OF THE FRENCH SOCIETY OF ASTRONOMY AND ASTROPHYSICS.

2019

- Model review, circuit review, thermal systems calibration
- <https://ui.adsabs.harvard.edu/abs/2019sf2a.conf...39H/abstract>

Skills

English	PET B1 level, Michigan B2, working on IELTS Academic
Spanish	Native level
Driver's Licence	Chilean Class B licence
Programming languages	Python
Data management system	MySQL
Document Preparation System	LaTeX
Lens simulation	OSLO
Operating systems	Windows, Mac, UNIX
3d Printing	Makerbot Replicator 2
Office suites	GoogleDocs, Microsoft Office, Power BI
Data Science	Python Machine Learning Algorithms

Personal Interest

My interest comprise of:

- Developing my skills in the area of data analysis to improve my research capabilities.
- Reading science fiction and fantasy literature, which fuels my creativity and sense of wonder, provides my with inspiration for innovative thinking in scientific contexts and growing as a person.
- Keeping up to date with the latest discoveries and events in astronomy.

References

Ph.D. Leonardo Bronfman

PROFESSOR

Department of Astronomy, Universidad de Chile
leo@das.uchile.cl

Ph.D. René Méndez

PROFESSOR

Department of Astronomy, Universidad de Chile
rmendez@uchile.cl

M.Sc. Miguel Piña

ELECTRICAL ENGINEER,

Atacama Pathfinder Experiment
miguel.pina@raig.uchile.cl