Almendra Paz **del Moral Lobos**

Data Scientist - MSc in Astrophysics student | Pontifical Catholic University of Chile

♀ Guayaquil 536, Santiago Centro

i Born in 23 de Octubre de 1996, Santiago, Chile

HABILITIES

Programming languages Python, R,SQL, supervised and unsupervised machine learning algorithms, aleatory methods

and problem resolution using advanced calculus, Matlab

Software Jupiter, Rstudio, Visual Studio Code, Oracle, Topcat, DBeaver, QFitsView, SAOImage DS9

S3, EC2, Athena, SageMaker AWS

Ubuntu, Linux, MacOS, Windows Operative systems

> Git, ET_EX, Microsoft Office, Jira Others



ACADEMIC AND PROFESSIONAL EXPERIENCE

Present June 2021

Data Scientist | VP Transformación y Soporte al Negocio, ENTEL,

Creation of risk ML models for business and individuals financing when they enter as clients of the company, exploratory analysis, creation of strategies and development of models with the purpose of avoiding fraud.

Data Science Teamwork

Present March 2022

Directed Research Institute of Astrophysics, Pontifical Catholic University of Chile,

Research in the area of lithium depletion in low mass stars under the tutelage of Julio Chanamé. Statistics and big data management are used.

Python Statistics big data

December 2020 August 2020

Assistant Teacher Institute of Astrophysics, Pontifical Catholic University of Chile,

- > Assistant teacher in 2 different occasions:
 - > August 2020 December 2020 : A walk through the Universe
 - > August 2020 December 2020 : Space, Time and Universe
- > Consists of reviewing tests, exercises, and exams, in addition to taking these. Realization and preparation of auxiliary classes.

University course | Massive course

December 2019

Directed research | Physical Sciences and Mathematics Faculty, UNIVERSITY OF CHILE,

Research course under the tutelage of Sebastián Lopez. The research deals with data from ESO VLT te-August 2019 lescope, specifically, they are obtained from MUSE and the data is of the IFU (Integral Field Unit) type. Statistical tools, big data management and predictive models were used.

Gravitational Arcs | MUSE | distant galaxies | Research | Galaxies | Python | QFitsView | SAOImage DS9 | Big Data

August 2020

School outreach Monitor | Communication area, Physical Sciences and Mathematics Faculty, University of Chile,

June 2018

- > Development of institutional talks and guided tours of the Faculty.
- > Participation in different career fairs (Santiago and regions).
- > Organization of the 4th Festival of Engineering and Sciences: Coordination Team of Schools. The festival had an attendance of 16.000 persons.
- > Development and participation of Online outreach due to COVID-19.

Scientific outreach | Vocational talks | Secondary School | Massive events

Julio 2019 March 2017

Assistant Teacher | Physical Sciences and Mathematics Faculty, UNIVERSITY OF CHILE,

- > Assistant teacher in 4 different occasions:
 - > March 2019 July 2019 : FI2002 Electromagnetism. (DFI)
 - > July 2018 December 2018: FI1002 Newtonian Systems. (DFI)
 - > July 2017 December 2017: MA2601 Ordinary differential equations. (DIM)
 - > March 2017 July 2017: MA2601 Ordinary differential equations. (DIM)
- > It consisted of reviewing tests, exercises, and exams, in addition to taking these (DFI- DIM). Realization and preparation of auxiliary classes (DFI). The courses were finished with high grades from the students and good feedback.

University course Massive course Physics department Mathematical engineering department

Enero 2018

Professional practice | Astronomy Department, UNIVERSITY OF CHILE,

Enero 2018

Professional practice of the Bachelor degree, which consisted of the theme "Co-evolution between super massive black holes and star formation" under the tutelage of Professor Antonios Katsianis. Numerical methods and programming was strongly required for this.grade of 6.2 (1 to 7 scale)

Python AGN SFR SMBH Hydrodynamic simulations EAGLE

2017

Private Professor, SACATEUN7,

2015

Carrying out private classes in Mathematics, Physics and Chemistry for high school and elementary school students.

Secondary School | Primary School

■ Work experience in other areas and Extracurricular Activities

PARTICIPATION ON "PROGRAMA DE LIDERAZGO FEMENINO EN STEM"

2021

Departamento Provincial de Educación Limarí, Ministerio de Educación, Gobierno de Chile

Program promoted by the Ministry of Education of Chile with a focus on guiding and guiding students interested in STEM areas of schools in the Punitaqui commune, IV region.

Scientific Communication | Secondary School | Teamwork

PARTICIPATION ON "MUJERES PODEROSAS" PROGRAM

2020

https://woomup.cl/

Program in which students from municipal schools who are interested in STEM careers are guided and mentored.

Scientific Divulgation | Mentoring

MODEL ON WE LOVE MODELS AGENCY

2017 - PRESENT

http://www.welovemodels.com

Under the tutelage of one of the two most important modeling agencies nationwide, I have managed to develop in different jobs with respect to what can be performed in the world of fashion, such as appearances in magazines, starring in commercials, music videos, fashion campaigns, fashion shows, workshops, fashion editorials, among others. Some of the clients I have worked with are: Vogue Latinoamérica, Revista Ya (appearing on their cover 2 times), Ripley, Paris, LG (Worldwide) Falabella Web, Hites, Pichara, ZooYork, Jumbo, Marika Vera, Marinoddo, T.H.C, The Line, Ford(Latam), Taco Bell(North America), Yanbal Unique (Perú), Lupe Gajardo, Davines, TIGI, LEONIDAS, Vogue Italia Web and a wide etcetera. Also, during my trajectory I have acquired a broad knowledge about social media, which have result on being sponsored by different brands on Instagram such as Pepsi, Garnier, Urban Decay, Bullboxer, Jean Paul Gaultier and others.

Vogue Latinoamérica Versatility Adaptation Teamwork

PARTICIPATION ON "PEQUEÑAS GRANDES ESTRELLAS" OUTREACH PROJECT

2020

http://pequenasgrandesestrellas.cl/

Participation on astronomy divulgation online proyect, in which questions related to astronomy made by the general public are answered.

Astronomic outreach General Public

SCHOLARSHIP

	2020 - Present	MSc in Astrophysics Pontifical Catholic University of C	hile
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2017 - 2019 Bachelor of Science in Astronomy University of Chile

2015 - 2016 Common Plan of the Physical Sciences and Mathematics Faculty University of Chile

2013 - 2014 Secondary Education Geronimo Rendic School, La Serena.

> > Academic Excellence. Participation on the student council 2014. 3° regional place on Physics Olympics in 4th grade category. Best PSU pondered score of the class.

2021 Coursera courses

- > Data Driven Astronomy
- > Applied Machine Learning in Python

2021-2022 DataCamp courses

- > Case Study: Exploratory Data Analysis in R
- > Exploratory Data Analysis in R
- > 🗗 Data Manipulation with dplyr
- > Preprocessing for Machine Learning in Python
- > Introduction to PySpark



Spanish English

+ STRENGTHS

- > Independent
- > Versatile
- > Resilient

66 Referees

Pilar Valderrama

Área de Comunicaciones, FCFM

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