Bruno Rodriguez M.
Phone: (+51) 972-764-215 | E-mail: rodriguez.bruno@pucp.pe |
Portfolio: brunorodriguez.works | LinkedIn: /in/bruno-cesar-rodriguez

Data analyst with a background in physics and over four years of experience in analyzing, processing, and visualizing complex data. Specialized in big data analysis, statistical modeling, and developing data-driven solutions. Strong skills in data cleaning, query optimization, and visualization creation. Effective communicator, able to translate technical findings into clear narratives for technical and non-technical audiences.

## WORKING EXPERIENCE

**Redi**, Lima: Data analyst (September 2024 - present)
- Data extraction and manipulation with SQL through the APIs of strategic partners, creating robust relational databases for subsequent analysis of trips and earnings.
- Development of analytical performance reports using Power BI, with a focus on weekly and monthly growth indicators in order to optimize decision-making.

**Academic experience:** Universität Bonn, European Southern Observatory, Academia Sinica Institute of Astronomy and Astrophysics (2018 - 2024)
- Design and coding of Python scripts for the efficient processing of large volumes of data, which resulted in a 50% reduction in the time required for analysis.
- Writing and updating of code documentation in order to improve the academic team's workflow and facilitate the replicability of experiments.
- Integration and cleaning of three large databases from the LOFAR observatory, increasing the sample size of quiescent galaxies by a factor of 10 with respect to previous studies.
- Statistical modeling of data from radio observations, which led to the discovery of anomalies that suggest the influence of active galactic nuclei in the observed properties.
- Preprocessing and modeling of astronomical data from stars in the post-AGB phase and application of advanced techniques for emission pattern recognition, whose conclusions were presented at an international astronomical conference.

## EDUCATION

**M.Sc. Astrophysics,** University of Bonn: (Bonn, Germany)
**B.Sc. Physics,** Pontifical Catholic University of Peru (Lima, Peru)

## PROJECTS

**Hydrostatic pressure as predictor of star formation** (Master's thesis project):
- Creation of a relational database with observed properties from nearby galaxies.
- Statistical modeling of the data, which confirmed a strong correlation between hydrostatic pressure and star formation rate.

## TECHNICAL SKILLS

Python programming (Numpy, SciPy) - Data analysis (Pandas, SQL) - Machine Learning (scikit-learn) - Deep Learning (PyTorch) - Data visualization (Seaborn, Power BI) - Version control (Git, GitHub) - Use of AI agents - ETL processes - Cloud computing (Databricks) - Microsoft Office (Word, Excel, Power Point)

## SOFT SKILLS

Critical thinking and creativity - Leadership - Teamwork - Event planning and moderation - Conflict resolution

## SPOKEN LANGUAGES

**Spanish**: native speaker - **English**: proficient - **German**: intermediate - **French**: basic