

Lina Florez

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SKILLS

Programming Languages: Python • SQL/MySQL • Javascript (including Google Apps Script)

Technical Skills: Statistical Analysis • Machine Learning • Data Visualization • Data Mining

Packages & Tools: Numpy • Pandas • Matplotlib • bash • Scipy • Jupyter • scikit-learn • Tableau • GitHub/git • Google Spreadsheets

Natural Languages: English (fluent), Spanish (fluent)

EDUCATION

University of Pittsburgh

Master of Sciences, Physics

August 2020 – April 2023

Pittsburgh, PA

University of Illinois at Urbana-Champaign

Bachelor of Science, Astronomy

August 2016 – May 2020

Urbana, IL

EXPERIENCE

MailMind AI

Data Scientist

December 2023 – Present

Pittsburgh, PA

- Led the implementation of Python scikit-learn classification models, optimizing operational efficiency for our ML/AI-driven email management product. Identified key performance metrics to evaluate model efficacy, ensuring a comprehensive understanding of optimal performance thresholds.
- Conducted thorough statistical analyses using Python and Jupyter notebooks, generating insightful data visualizations to communicate findings effectively and guide strategic decision-making processes.
- Facilitated clear understanding by delivering detailed reports and engaging presentations. Helped to foster a culture of transparency and collaboration, empowering team members to contribute effectively towards our shared mission of delivering solid email management solutions.

Rapid TPC

Software and Production Operations Intern

June 2023 – December 2023

Pittsburgh, PA

- Spearheaded the development of a Flask API to automate production blueprints, which resulted in streamlined workflows and improved manufacturing productivity.
- Crafted a user-friendly interface using Google Spreadsheets and Google Apps Scripts, seamlessly integrated with the Flask API to optimize product specification inputs. This innovative solution empowered our team to make data-driven decisions with ease, contributing to increased efficiency and operational excellence.
- Collaborated with the CEO to meticulously document diverse manufacturing processes, ensuring clarity and consistency across operations.

University of Pittsburgh

Graduate Research Assistant, Department of Physics and Astronomy

August 2020 – April 2023

Pittsburgh, PA

- Developed and refined MANGA-C, an astronomy Python package made to facilitate accurate forecasting of astronomical observations. Utilizing advanced statistical analysis techniques, I ensured the seamless integration of galaxy observations into the package framework, enhancing precision and reliability of data analysis processes.
- Conducted comprehensive data analysis on complex datasets, taking galaxy observations and extracting valuable insights through advanced statistical analysis methods.
- As a teaching instructor for over 300 students in Introduction to Astrophysics, I fostered an engaging virtual learning environment to facilitate student comprehension and retention of key introductory astrophysical concepts.

Princeton University

Research Assistant, Astrophysical Department

June 2017 – May 2020

Princeton, NJ

- Leveraged SQL and Python in advanced data science applications to conduct comparative analysis of galaxy properties, extracting valuable insights from large astronomical datasets.
- Executed Principal Component Analysis (PCA) to model and develop sky subtraction algorithms, thereby enhancing our understanding of atmospheric interference in astronomical observations.
- Effectively communicated complex research methodologies and results through multiple presentations, ensuring clear understanding to diverse audiences, fostering a culture of continuous learning and collaboration.

PROJECT

DESI-ML

- Applied machine learning regression models, to analyze around 20,000 Dark Energy Spectroscopic Instrument (DESI) survey spectra for predicting physical characteristics of galaxies.
- Achieved enhancements in the Normalized Average Absolute Deviation (NAAD) and the Spearman Correlation Coefficient (SCC)