Heli Gonzales Perez

Senior Data Scientist

Lima, Peru (GMT-5) (+51) 998-885-625 <u>heligonzalespe@gmail.com</u> <u>Linkedin profile</u>

Data Scientist with 6 years of experience in data science, machine learning, and applied analytics, leading end-to-end projects in the banking and financial sectors. I have developed solutions using models such as Gradient Boosted Trees, K-Means, and Multi-Armed Bandits, applied to credit products, pricing, and recommendation systems. Proficient in Python, SQL, Azure ML, Azure Cognitive Services, Databricks, and MLFlow, with a focus on automation, A/B testing, and deployment in production environments. I have implemented models with direct business impact exceeding S/.10 million, optimizing campaigns and commercial processes. I've worked closely with cross-functional teams and have led internal mentorship programs and technical training sessions. I'm looking to grow in remote and international environments where I can deliver innovative, business-driven data solutions.

EXPERIENCE

Banco de Credito del Peru — Aug, 2021 - Present Data Scientist

- Developed a **financial product recommendation system** using Gradient Boosted Trees and Logistic Regression, resulting in **S/.10 million in potential captured value** by increasing conversion rates and commercial impact.
- Built a **pricing adjustment model** for contingent banking products using Decision Trees and K-Means, generating an estimated **S/.8 million in business impact** for wholesale banking.
- Created **predictive models** to optimize loan disbursement processes in the SME segment, applying classification techniques and experimental validation, with **S/.2 million in captured value**.
- Designed and implemented a **Contextual Multi-Armed Bandit** reinforcement learning algorithm to recommend personalized content in loan acquisition strategies.
- Led and deployed end-to-end predictive models, from initiative design and A/B testing to production rollout, collaborating with business and IT teams.
- Designed and implemented an **NLP** platform for massive call feedback analysis using **SBERT**, **HDBSCAN**, and topic modeling (**BERTopic**) embeddings to identify churn drivers and cross-selling opportunities.
- Built a "Content Factory" on **Azure Cognitive Services**, integrating Azure OpenAl (GPT-4) for copywriting and Azure OpenAl DALL·E 3 for image generation.
- Scaled the use of analytics tools by implementing an **AutoML** pilot for other teams as part of a broader data democratization strategy.
- Delivered internal training sessions on **AzureML**, integrating the OpenAl API for image generation and editing in
- Reduced analysis time from 6 hours to 1–2 by automating processes and migrating optimization code from Julia to Python for an internal recommendation tool.
- Managed the technical and functional coordination for the deployment of predictive models in Azure, using Databricks, MLFlow, and ADLS.
- Organized and led the data team's mentorship program, identifying junior talent needs, coordinating mentor assignments, and building a **Power Apps-based registration system** to streamline the process.

Quantmoon Technologies — Dec, 2019 - Dec, 2022

Quantitative Analyst

- Developed investment models using Machine Learning in Python, including backtesting with libraries such as Scikit-learn and Numba.
- Designed and tested trading algorithms in NinjaTrader (C#), evaluating performance using historical financial data.
- Automated data extraction using web scraping with BeautifulSoup, improving input quality for financial modeling.
- Deployed analytics projects on Google Cloud Platform, integrating production-grade processing pipelines.
- Managed version control and collaborative coding using GitHub, maintaining consistency and coordination within the team.

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SKILLS

- Languages and Data Analysis: <u>Intermediate</u>: Python, R, Oracle SQL.
- Version control and environments: Git / GitHub, Linux.
- Cloud and MLOps: Microsoft Azure, Google Cloud Platform, Azure Databricks, Azure ML, MLFlow, Apache Spark.
- Analytics and Visualization: Power Bl.
- Database: ElasticSearch
- General Tools and CMS: Wordpress.
- Project Management and Collaboration: Jira
- Languages: English: Avanzado (C1); Spanish: Native.

CERTIFICATIONS

Microsoft - Azure Al Engineer Associate, 2025.

Microsoft - Azure Data Engineer Associate, 2024.

Microsoft - Azure Data Fundamentals, 2024.

Platzi - Convolutional Neural Networks with Python and Keras, 2023.

Platzi - Data Analytics with Power BI, 2023.

Microsoft - Azure Fundamentals, 2022.

Platzi - Google Cloud Platform Fundamentals, 2022.

Platzi - Docker Course, 2022.

Platzi - Introduction to ElasticSearch, 2021.

Arizona State University - Design of Experiments, 2020.

Imperial College London - Mathematics for Machine Learning, 2020.

IBM - Advanced Data Science with IBM, 2020.

IBM - IBM Data Science, 2020.

EDUCATION

Universidad Nacional Agraria La Molina – *Lima, Peru. Master in Applied Statistics, 2022.* **Universidad Nacional Agraria La Molina –** *Lima, Peru. Forestry Engineering, 2017.*