RENATO CASTRO CRUZ

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WORK EXPERIENCE

Cervecería Centro Americana S.A. - Guatemala Jul 2024 - Current
Regional Advanced Analytics Manager

- Led the advanced analytics strategy across Guatemala, Honduras, and El Salvador, managing a team of 5 data scientists and data engineers.
- Deployed a project called "Smart Coolers Allocation" project using a classification model and advanced analytics, generating a $1.6MM margin in 6 months with 1,790 coolers deployed nationwide.
- Built a recommendation engine called "Suggested Order" that increased the number of skus by 15% and increased volume sales by 2.3%, generating a $2M margin impact in 12 months. The system was fully integrated into the custom interface built on our salesforce app.
- Developing a pricing engine to understand in which products should the company increase the price of a product to generate margin. This tool generated a value of $20MM based on the decisions taken.
- Developed a time series forecasting model to estimate water consumption based on production requirements, enabling more efficient resource planning.

Millicom International - Panama Apr 2022 - Jul 2024
Advanced Analytics Lead

- Part of the team that led the analytics and digital optimization efforts across five LATAM markets El Salvador, Guatemala, Paraguay, Honduras, and Bolivia.
- Designed scalable ETL pipelines and cloud infrastructure on AWS to power Tableau dashboards for sales and executive decision making.
- Developed customer segmentation and classification churn models that doubled active users at 30 days from 410K to 850K and increased revenue by 5% YoY.
- Delivered predictive models that helped reduce customer churn by 10%, using commercial actions.
- Helped to achieve 53K monthly loans in Paraguay by optimizing digital lending journeys with data science and Power BI Dashboards.
- Implemented a cost-efficiency strategy that reduced the Customer Acquisition Cost from $2.50 to $0.58, saving $250K/month while sustaining growth.

Anheuser-Busch InBev - Peru Jan 2021 - Mar 2022
Senior Data Scientist

- Built machine learning segmentation models that enabled digital onboarding of 90% of the client base and drove $2M in operational savings.
- Designed algorithmic targeting strategies for communication, resulting in a 8% conversion rate and more than 10M monthly interactions.
- Developed trade marketing algorithms to prioritize Point-of-Sale activities based on client profiles and commercial targets, contributing to a 10% YoY growth.
- Analyzed high-volume transactional and behavioral data from the BEES app to inform strategic commercial and engagement decisions using Power BI Dashboards.

Pichincha Bank - Peru Jan 2020 - Dic 2020
Advanced Analytics Assistant

- Assisted in the development of a customer churn prediction model for corporate banking, enabling targeted retention.
- Co-developed a default prediction model for revolving credit clients in collaboration with the risk team.

· Built Azure-based Web Applications for Business Data Visualization and Monitoring.

EDUCATION

National University of Engineering - Peru *Aug 2015 - Oct 2020*
B.Sc Industrial Engineering / Top Third GPA: 4.0

ACHIEVEMENTS

· Invited among MIT MicroMasters students to visit the MIT Institute for Data, Systems, and Society (IDSS) 2025 [Link]
· 1° Place Datathon Entel 2022 [Link]
· 1° Place Datathon BNP Paribas Latin America 2021 [Link]
· 1° Place Datathon Bancolombia 2020 [Link]
· 2° Place Laboratoria Hackathon (Team Coach) [Link]
· 2° Place Anheuser-Busch InBev Brewing Data Cup(Mexico, Colombia, Peru) 2020 [Link]
· 1° Place Data Talent Movistar Competition 2019 [Link]
· 1° Place Datathon UNI - Pichincha Bank Competition 2019 [Link]

SPECIALIZATIONS

· MIT MicroMasters Program in Statistics and Data Science [Link]
· Harvard Aspire Leaders Program 2025
· Oxford Machine Learning Summer School 2025
· Google Kaggle 5-Day Gen AI Intensive, 2025 [Link]
· Deep Learning Autumn School DeepLearn - Lulea, Sweden 2022 [Link]

RESEARCH AND ACADEMIC PROJECTS

"Improving Asset Allocation in a Fast Moving Consumer Goods B2B Company: An Interpretable Machine Learning Framework for Commercial Cooler Assignment Based on Multi-Tier Growth Targets": Paper presented at the Artificial Intelligence in Business 2025 AIxB Laguna Hills, California 2025. [Link]

"Enhancing Anomaly Detection with Spatial Transform Networks": White paper presented at the LatinX in AI Workshop NEURIPS on Neural Information Processing Systems in New Orleans, Lousiana 2023. [Link]

"Anti Spoofing Face Detection Technique based on Transfer Learning Convolutional Neural Networks and Real-Time Facial Landmark Detection": White paper presented at the LatinX in AI Workshop International Conference of Machine Learning in Long Beach, California 2019. [Link]

SKILLS

Programming Languages: Python, R, Spark (Advanced) / Visualization: PowerBI, Tableau (Advanced) / Databases: SQL, NoSQL, Snowflake (Advanced) / Cloud: AWS, Azure, Google Cloud Platform, Databricks (Intermediate) / Deep Learning: PyTorch, Tensorflow 2.0, Keras (Advanced) / Git (Advanced)