

EXPERIENCE

Deloitte - AI & Data - Strategy & Advanced Analytics, Mexico City
Senior Consultant

May 2024 - Present

Developed analytical models, software tools, financial projections, and strategic deliverables that informed C-suite decision-making. Leveraged data science expertise and business/strategy know-how to deliver analytics-driven solutions tailored to client needs. Produced scalable, structured, documented, and reproducible code, consistently following software engineering best practices.

- Automated enterprise risk assessment processes through GenAI implementation on AWS, delivering a scalable solution that enhanced efficiency and standardized evaluation methodology.
- Built a land valuation model, using machine learning, that bases land value on relevant land appraisals and features. Then created an optimal land-use allocation strategy using an optimization algorithm.
- Developed a tool built in python to automate vehicle sales validation across 200+ dealerships of six brands, reducing process time by 75% and eliminating human error, generating annual savings of \$1M+ MXN.
- Extracted, cleaned, and structured 10 years of power generation data (140+ plants) from a Latin American country for forecasting models that supported national energy investment decisions.
- Designed a 10-year growth plan for a hotel group valued at \$1B+ USD, including financial valuation and strategic initiatives, capturing an additional present value of \$100M+ USD.
- Presented technical results at the C-suite level and managed multidisciplinary teams.
- Gained cross-industry experience in energy, hospitality, real estate, and auditing sectors across Latin America.

EDUCATION

Instituto Tecnológico Autónomo de México (ITAM)
B. S. Applied Mathematics

2019 - 2024

- Designed an application that decomposes any music playlist into sub-playlists of similar songs using Spotify Web API features and clustering.
- Built a convolutional neural network based on the AlexNet architecture for the CIFAR-10 dataset, achieving 70.2% test accuracy and leveraging Nvidia CUDA for faster GPU training.

SKILLS

Tools & Languages: Python (numpy, pandas, scikit-learn, pytorch), Git, AWS, SQL, R, Excel

Technical Skills: Machine Learning, Statistical models, Statistical Bayesian modeling, Numerical optimization, Linear programming, Time series analysis, Markov chain Monte Carlo, Neural networks, Regression, Clustering, PCA, Random forests, Regularization, Generalized regression

Core Skills: Strategic thinking, quantitative analysis, executive communication, leadership, verbal and written clarity & precision