MARIAN (SHANTI) SANCHEZ BARBERO
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EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, SLOAN SCHOOL OF MANAGEMENT — Cambridge, MA
Master of Business Analytics, Operations Research Center — Sep 2023-Aug 2024
- Coursework: Machine Learning under Optimization Lens, Analytics Edge, Deep Learning, Marketing Analytics
- Built CNN for malicious smart contract detection (Python, Keras, TensorFlow)
- LLM Authorship prediction & personalized text generation (OpenAI)
- Activities: MITxHarvard Women in AI, Women in Management Club, Business Development Club

MEXICO AUTONOMOUS INSTITUTE OF TECHNOLOGY — Mexico City
Master of Data Science, Bachelor of Science in Business Engineering & Industrial Engineering (Dual Degree) — 2017-2023
- Coursework: Computer Vision, Bayesian Modeling, Reinforcement Learning, Casual Inference, Statistics, Optimization

TECHNICAL SKILLS

Python, R, SQL, Julia, Git, scikit-learn, TensorFlow, Keras, PyTorch, HuggingFace, LangChain, Autogen, AWS, Paradime (dbt-style modeling), dbt, ETL pipelines, Data Lineage, Data Modeling, Regression, Hypothesis Testing, A/B Test Analysis, Causal Inference (GeoLift), MMM (Robyn, Meridian), Time Series, NLP, Docker, Azure, Tableau, PowerBI, Plotly, D3.js, Hex, LLM finetuning, embeddings, RAG, VectorDBs, prompt engineering, LoRA

EXPERIENCE

CIRKUL — Newton, MA
Senior Data Analyst (Data Scientist) — Sep 2024- Nov 2025
- Built and deployed LLM-powered systems (OpenAI, OpenAI Agents Workflow, ChatKit, LangChain, Apify) for CX and marketing analytics, generating insights from 20k+ weekly social posts (IG, Reddit, FB) to surface churn drivers, accelerate creative insights and automate manual review workflows
- Led Marketing Mix Modeling (Robyn/Meridian) and DMA-level causal lift experiments (GeoLift), reallocating budget to higher-ROAS channels and improving spend efficiency
- Designed and maintained Hex/PowerBI dashboards to monitor overall business performance (nCPA, revenue, subscription health), Amazon/DTC funnel drop-offs and new vs. repeat behavior, informing site performance improvements and marketing strategies (Amazon Seller Central, Amplitude, Hex)
- Partnered with Data Engineering to define data requirements, maintain data integrity and optimize ETL pipelines (Paradime, AWS S3 and dbt-style modeling)
- Translated Marketing, CX, Product, Logistics and Retail stakeholder questions into analytical workflows from requirements → analysis → delivery, producing clear, data-backed recommendations

MIT SLOAN | DOOSAN BOBCAT CAPSTONE PROJECT — Cambridge, MA
Data Scientist — Feb 2024-Aug 2024
- Built a multi-agentic data extraction system for YouTube, web pages and Reddit using LLMs (Autogen, Apify, OpenAI)
- Performed sentiment and value-curve analysis using NLP and LLMs (OpenAI)
- Developed dashboards with Tableau/Plotly, presenting insights to technical and non-technical audiences

MIT SLOAN | OPERATIONS RESEARCH — Cambridge, MA
Research Assistant under Professor Georgia Perakis — Sep 2023-May 2024
- Supported an in-depth analysis of promotion strategies for BigC, the largest retailer in Thailand, to enhance the profitability of fabric softeners aiming to predict the quantity sold based on various features (pricing, promotions, sales patterns, etc.)
- Identified key sales drivers providing insights into which features have the most predictive power

DIDI — Mexico City
Operations Analyst — Dec 2021-Aug 2023
- Conducted a geofence strategy promotion based on density of demand increasing trip growth by ~3% (SQL, Python, QGIS)
- Increased ROI 10% by implementing a cohort strategy "do X get Y" to incentivize supply (A/B Testing)
- Delivered insights to business stakeholders through analytical presentations

MORGAN STANLEY — Mexico City
Equity Research Analyst - Intern — Mar 2020-Mar 2021
- Built valuation and forecasting models to support equity recommendations (Python, Prophet)