MARIAN (SHANTI) SANCHEZ BARBERO
Cambridge, MA
(857)-468-0810 | shan1006@mit.edu

EDUCATION

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, SLOAN SCHOOL OF MANAGEMENT — Cambridge, MA
Candidate for Master of Business Analytics, Operations Research Center, August 2024 — 2023-Present

- Coursework: Machine Learning under Optimization Lens, Analytics Edge, Deep Learning, Marketing Analytics
- Machine Learning Project: Programmed a CNN model to detect malicious smart contracts (Python, TensorFlow,)
- Optimization Project: Designed an Amazon recommendation system based on product ratings and price (Gurobi, Python)
- Deep Learning Project: Authorship Prediction and Personalized Text Generation Using Chat Data (OpenAI)
- Activities: MITxHarvard Women in AI, Women in Management Club, Business Development Club

MEXICO AUTONOMOUS INSTITUTE OF TECHNOLOGY — Mexico City
Master of Data Science — 2022-2023

- Coursework: Deep Learning, Bayesian Modeling, Numerical Methods, Data Visualization

MEXICO AUTONOMOUS INSTITUTE OF TECHNOLOGY — Mexico City
Bachelor of Science in Business Engineering & Bachelor of Science in Industrial Engineering — 2017-2022

- Honors: 90% scholarship award for academic excellence to cover joint degree
- Coursework: Logistics, Data Mining, Statistics & Probability, Finance, Econometrics, Marketing, Data Structures
- Projects: Methodology for Sentiment Analysis in Twitter using Python, Applied to Electric Cars (Scikit-learn, NLP)
- Leadership: President of ITAM's Engineering Magazine publishing topics through the eyes of students from different majors

TECHNICAL SKILLS

- Python, R, Julia/JuMP, SQL, QGIS, MATLAB, Tableau, Looker, Power BI, Azure Open AI, Gemini, Autogen, Langchain

EXPERIENCE

MIT SLOAN | DOOSAN BOBCAT CAPSTONE PROJECT — Cambridge, MA
Project: *Build multi agents to extract web information and leverage it to explain Mkt Share (Autogen, OpenAI)* Feb 2024-Present

MIT SLOAN | OPERATIONS RESEARCH — Cambridge, MA
Research Assistant under Professor Georgia Perakis — Sep 2023-May 2024

- Analyzed promotion strategies for BigC, the largest retailer in Thailand, in order to increase softeners profit (Python)

MIT SLOAN | ASIAN WOMEN FOR HEALTH — Cambridge, MA
Non-profit organization dedicated to advancing Asian women's health — Sep 2023-Dec 2023
Analytics Lab Team Member: finding patterns in large health survey data

- Built a Decision Tree Classification Model to explore the intricate relationship between social determinants and health care insurance within Asian communities (Python, Tableau)
- Analyzed relationship between social determinants and stress level within cultural communities to tailor training programs
- Identified cohorts to target for education, awareness, and development of community resources on health insurance and communicated them to the Chief Development and Innovation Officer

DIDI — Mexico City
Leading mobile transportation platform — 2021-2023
Operations Analyst

- Conducted a geofence strategy promotion based on density of demand increasing trip growth by ~3% (SQL, Python, QGIS)
- Increased ROI by 10% by implementing a cohort strategy "do X get Y" to incentivize supply
- Delivered presentations and effectively communicated complex concepts to diverse audiences of 100 + executives

MORGAN STANLEY — Mexico City
Equity Research Analyst - Intern — 2020-2021

- Created valuation and forecasting price models to build portfolio insights (Python)
- Developed a forecasting model for cement prices and a descriptive analysis for potential bridges reconstruction in the US (R)

ADDITIONAL INFORMATION

- Languages: Native Spanish, Intermediate Korean, Basic Japanese
- Interests: Chess and Boardgames, Learning New Languages, Roller Skating and Team Choreographies