Miguel Angel Lopez Montiel

Applied Scientist | Data Science Manager | AI Leader

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SUMMARY

Applied Scientist and Data Science Manager with more than 5 years of experience designing and deploying AI and computer vision solutions in healthcare, robotics, and manufacturing. Skilled in cloud-based machine learning, scalable pipelines, and cross-functional leadership. Proven record of peer-reviewed publications, industry—academia collaborations, and mentorship of junior engineers. Passionate about building responsible AI that improves efficiency and competitiveness.

SKILLS

- Programming & AI Tools: Python, C++, SQL, LangChain, Vercel, GitHub, Docker
- AI/ML Expertise: Computer Vision, Deep Learning, NLP, Time-Series Forecasting, Embedded AI
- Data & Systems: DuckDB, FastAPI, Streamlit, PostgreSQL, Great Expectations
- Cloud & Infrastructure: AWS SageMaker, GCP Vertex AI, Azure AI, Docker, Kubernetes
- •Leadership & Strategy: Cross-functional Team Management, Industry Collaboration, Ethical AI, Sustainability

EDUCATION

MBA – CETYS Universidad, Tijuana, B.C. Senior Management & Leadership	2025 – In progress
PhD - CITEDI, IPN, Tijuana, B.C. Artificial Intelligence, Deep Learning, Edge AI, Autonomous Driving	2020 - 2023
MSc - CITEDI, IPN, Tijuana, B.C. Artificial Intelligence, Machine Learning, Computer Vision, Autonomous Driving	2018 - 2020
BSc – UABC, Tijuana, B.C. Computer Engineering	2012 - 2017

Professional Experience

Data Science Manager – ITJ Labs

April 2024 – Present

Pioneered the development of ITJ's AI Practice and business model, leading AI solutions for biotech and manufacturing clients, and mentoring new AI & Data Science teams to scale nearshore capabilities.

Associate Professor - UABC-FCQI

September 2023 – June 2024

Prepared new generations of computer and software engineers through teaching core foundations, guiding applied AI projects, and mentoring students to strengthen both hard and soft skills.

PROJECTS & AWARDS

AutoNOMOS Model Car (CITEDI – IPN) Developed real-time AI control system for autonomous driving prototype; awarded 4th place nationally	2017 - 2020
BajaBot (El Trompo Interactive Museum) Built educational robotics AI prototype for public science outreach earned 2nd place recognition	Summer 2018
Baja Digital Hackathon (UC San Diego) Co-developed AI-powered healthcare assistant ranked in Top 10 for innovation and social impact	Spring 2019
CI2T Research Award (UABC) Won Best Paper Award for applied AI research on computer vision and embedded systems	Spring 2019