Jorge Arturo Uc Torres

DATA SCIENTIST Machine Learning · AI · Data Analytics

Puebla, Mexico · jorgearturouctorres@gmail.com · +52 993 106 6444
GitHub: Slowpokeislife · LinkedIn · Online Portfolio

Data Scientist with a strong mathematical background and experience in artificial intelligence, natural language processing (NLP), fine-tuning, machine learning, software development, automation, and cleaning, transforming, and analyzing large datasets. Focused on solving complex problems through data-driven solutions. Ten years of teaching experience have strengthened my technical communication skills and ability to explain analytical findings to diverse audiences and cross-functional teams.

Technical Skills

Programming
Python, C, C++, JavaScript, Kotlin, and SQL.

Data Engineering
Pandas, Polars, NumPy; web scraping (Playwright); PostgreSQL, MongoDB, SQLite, and NoSQL environments.

Machine Learning & AI
PyTorch, TensorFlow, scikit-learn, Hugging Face Transformers, MLflow, and Optuna. NLP, LLMs, RAG architectures, fine-tuning (LoRA), and deep learning.

BI & Applied Mathematics
Power BI, Tableau, advanced Excel, and MATLAB; predictive analytics, mathematical and statistical modeling, simulation, and numerical analysis.

DevOps & Deployment
Git, GitHub, Docker, Kubernetes, and Linux; process automation, model deployment, and web/mobile application development.

Tools & Cloud
AWS, Cloudflare, Firebase, Jupyter, and VS Code; cloud service integration.

Selected Certifications

NVIDIA
Transformer-Based NLP · Building RAG Agents with LLMs · Deep Learning · Accelerating End-to-End Data Science · Building Real-Time Video AI Applications

Santander / MIT
Excel · Power BI · Big Data · Cloud Computing

AWS
Machine Learning

BUAP
Data Science Diploma Program

Additional certificates in my portfolio.

Languages

Spanish — Native
English — C1, APTIS (British Council)

Professional Experience

Data Scientist · Laboratorios Dicliva
Puebla, Mexico — Jun. 2024 – Jun. 2026

- Developed **Python and database systems** for sales, inventory, customer records, and reporting, improving the organization and retrieval of historical information.
- Implemented a **chatbot** to support queries and provide assistance with business information.
- Built a **cloud-based management platform** with mobile access and dashboards for financial, administrative, and operational indicators across multiple locations, supporting decision-making.

Mathematics Instructor
Academic Tutoring & Competition Coaching — 2016 – Present

- **Personalized instruction:** Over 10 years teaching students from elementary school through university, developing the ability to explain complex analytical concepts to diverse audiences.
- **Mathematics Olympiad coaching:** Certified preparation of high-achieving students for national competitions, including the Mexican Mathematics Olympiad (OMM) and OMMEB.
- **Institutional collaboration:** Designed and taught academic support and intensive competition preparation courses at Colegio Tabasco (2019 and 2025).

AI Trainer (RLHF) · Outlier AI
AI Model Evaluation & Refinement — Jan. – Nov. 2024

- Provided expert feedback for LLM alignment through **RLHF**, reviewing advanced mathematics responses for technical accuracy, logical clarity, and reduction of model hallucinations.

Education

M.S. in Data Science · BUAP — 2024 – 2026
Degree examination passed · Cum Laude · Diploma pending issuance
Thesis: **Development of a Language Model for the Translation of 15th- and 16th-Century Classical Nahuatl Texts**.

- **Corpus:** Used **Kraken OCR** on the Florentine Codex, followed by algorithmic and manual cleaning, segmentation, and alignment of approximately **40,000 sentence pairs**.
- **Model:** Classical Nahuatl-to-English translation using **NLLB-200**, with LoRA, Layer Freezing, and LISA.
- **Evaluation:** Automated metrics (**BLEU, chrF, and TER**) complemented by **human evaluation**. Dataset and model published on Hugging Face (DOI: 10.57967/hf/11168).

B.S. in Mathematics · BUAP — 2019 – 2024
Coursework in statistics, mathematical modeling, and problem-solving.
Selected project: **Mathematical analysis of human DNA using systems of differential equations**.

Projects, research, and certifications are available on my online portfolio.