Eduardo Franco

ENGINEER IN PHYSICS

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Examination	Majors	Institute	Year
Student	Engineer in Physics	ITESM Monterrey	2021-2025

About Me

I am a resilient and adaptable physics engineering student with a deep passion for both science and the humanities. Overcoming seven surgeries and three herniated discs, I have built a consistent path of discipline, perseverance, and personal growth.

I thrive in challenging environments, whether it's developing high-performance simulations or leading interdisciplinary teams. As a conscious and supportive leader, I aim to elevate both the project and the people behind it. One of my proudest moments was representing Mexico at the 2019 Pan American Games, where we earned first place — a testament to the mental and physical resilience that defines who I am.

Professional Experience

Machine Learning Analyst – Supply Chain & Forecasting | Delphus Consulting Apr 2024 – Present

- Designed and deployed forecasting models such as **LSTM**, **XGBoost**, and **ARIMA**, enabling robust demand prediction at SKU, category, and store levels across various time horizons.
- Built end-to-end ML pipelines using **AWS S3** and **EC2**, automating model training, prediction, and inventory decision support.
- Performed statistical analysis on supply chain and store-level operations to extract actionable insights and temporal demand patterns.
- Developed and deployed data-driven tools to support corporate planning and inventory optimization for clients including Comercial Treviño, Adosa, Ellaz, JJ Forza, Deacero .
- Contributed to industrial real estate forecasting, projecting price trends to support investment decisions for companies like Prologis.

Research Intern | Tecnológico de Monterrey Aug 2024 – Present

- Developing GPU-accelerated physical simulations using CUDA, focusing not only on exploiting parallel computation but also on optimizing algorithmic efficiency to minimize memory and compute resource usage. with the goal of creating an engine that allows users to perform simulations without needing to write extensive code.
- Implement simulations of optics, fluid dynamics, granular systems, electrodynamics, and manifold kinematics in Julia, fully accelerated on GPU and optimized to run with minimal computational overhead.
- Lead the development of **SymmetryX**, which earned **3rd place** at **ExpoIngenierías 2024** at Tecnológico de Monterrey.
- Present **SymmetryX** at **JuliaCon 2025**, becoming the first undergraduate from Mexico and the second overall team after UNAM to be invited to the international conference.

Technical Skills

Languages	Python, C/C++, Julia, CUDA
Data Tools	SQL, Excel
ML & DL Frameworks	XGBoost, PyTorch, TensorFlow, Scikit-learn
Cloud & DevOps	AWS (S3, EC2), Git, Linux (Ubuntu, Fedora)
Others	LaTeX, Bash, Markdown

Languages

- Spanish (Native)
- English (C1-C2)
- French (B2)