+52 55 3223 5972

# Roberto Alejandro Gutiérrez Guillén

+971 54 54 76683 Machine Learning Engineer / Product Manager

GitHub: /the-guti - LinkedIn: /in/robertoalejandro/ - Mail: rgtzgn@gmail.com / roberto.guillen@mbzuai.ac.ae

#### Education

## Mohamed Bin Zayed University of Artificial Intelligence (MBZUAI)

Abu Dhabi, UAE

Last Update: February 2023

Master of Science in Machine Learning (GPA 3.6/4.0)

August 2021 - May 2023

- **Research Focus:** Federated Reinforcement Learning, NILM Time Series, GANs, Power Grid Optimization.
- Relevant coursework: Optimization, Probabilistic & Statistical Inference, Advanced Machine Learning, AI Maths.
- Activities: 1st place in Hack for Space and Cisco Challenge, 3rd place in Project Set UAE.

Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM – Santa Fe)

Mexico City, Mexico

Bachelor of Science in Computer Science (GPA 94/100)

January 2016 – December 2020

- Study abroad: International Business Exchange Program at Fudan University in Shanghai, China.
- Activities: ICPC LatAm Regional Finalist, 2<sup>nd</sup> Place/150 Bus Challenge INCmty.

# **Experience**

#### JP MORGAN CHASE & CO

Mexico City, Mexico

Software Developer

February 2021 – July 2021

 Managed and executed several LatAm technology projects from draft to completion, involving dozens of teams in 8 different countries.

#### **PROCTER & GAMBLE**

Mexico City, Mexico

Brand Management Scholar

February 2020 – December 2020

• Coordinated the launch of a new product line, including in-store strategy and media, resulting in more than 2% growth for the category.

**GOOGLE** 

(Remote) Boston, USA

Software Product Sprint Participant

*May 2020 – August 2020* 

• Authored a web application using Java, JS, HTML, CSS, and YouTube API to watch videos with others.

#### JP MORGAN CHASE & CO

Mexico City, Mexico

System Architect Intern

November 2019 – February 2020

Led dozens of internal audits for critical LatAm transaction systems and updated their internal documentation.

#### **CEMEX**

Biel/Bienne, Switzerland

Corporate Intellectual Property & Intangible Assets Intern

August 2018 – November 2019

• Led initiative to organize a hybrid event about intellectual property. Logistics included more than five time zones, 16 countries attending virtually, and more than 60 people.

## **Projects**

**BCTE** 

2022

• Created Hierarchical Architecture of P2P energy markets between microgrids and households. Harnessing the power of RL to establish prices and control distributed energy resources (PV panels, batteries, etc...).

**NILM** 

<u>REPO</u> | 2022

• Proposed improved method for Multi-Label Non-Intrusive Load Monitoring (NILM) with clustering via GMM and MySignal2Vec algorithm for efficient low-end embedded device deployment.

## Who wants to be a painter

**REPO** | 2021

• Benchmarked and analyzed two state-of-the-art generative model techniques for style transfer using LapStyle (PaddlePaddle) and StyleGAN-ADA(TensorFlow) for Monet paintings.

## **N-body Simulation**

**REPO | 2020** 

• Programmed and deployed 3D interactive physics simulation of the N-Body problem with ODEX and Three.js.

### Skills and languages

**Programming languages:** Python, C/C++, MATLAB, Java, SQL, JavaScript, Prolog. | **Languages:** C2 English/Spanish. **Others/Frameworks:** PyTorch, NumPy, Matplotlib, SciPy, Pandas, OpenCV, Open MP, OpenGL, GCP, Azure, AWS, VR SDKs, Unity, Bash, Git, PowerBI, MySQL, MongoDB, Apache Spark, Angular, Ionic.