KIN OCÉLOTL C. LÓPEZ MENDOZA

Data Scientist

kinlopezm@gmail.com | Guerrero, Mexico City | kinocelotl.com | /kinocelotl
github.com/kinocelotl

CAREER OBJECTIVE

In my pursuit of a role in Data Science, I bring together my expertise in statistical analysis and Python programming, reinforced by a solid foundation in astrophysics. My goal is to leverage data-driven insights to align with and enhance business strategies. Skilled in interpreting complex data, I aim to translate analytical findings into actionable business solutions, fostering an environment where data informs key decisions and drives business success.

EXPERIENCE

Data Scientist

Evidente

May. 2024 – Jan. 2025 | Mexico City, México

Development in the field of Data Science with a focus on Natural Language Processing (NLP):

- Designed and implemented batch pipelines for Large Language Models (LLMs) using Gemini and Bison for automated conversation summarization.
- Used **Python** and **Pandas** for data preprocessing, ETL workflows, and exploratory analysis.
- Worked with **BigQuery**, **Firestore**, and **Vertex AI** to build and deploy scalable NLP systems on **Google Cloud Platform**.
- Applied **prompt engineering** techniques to fine-tune and evaluate LLM responses across diverse conversation datasets.
- Collaborated with teammates to integrate and supervise LLM-based features, including prompt review and testing.
- Prototyped with **Google AI Studio** and **OpenAI's GPT** to benchmark and compare LLM performance.
- Modularized the codebase using **Hexagonal Architecture**, **Vertical Slicing**, and **Screaming Architecture** principles to enhance maintainability and team onboarding.
- Delivered ready-to-use Cloud Shell scripts to facilitate integration with Data Engineering pipelines.

Sr. Salesforce Developer

Mi Lámina

Aug. 2022 – Nov. 2023 | Mexico City - N.L., México

Advanced Salesforce development and configuration:

- Designed and implemented complex validation processes to ensure business rule compliance.
- Automated workflows using **Flows** and **Process Builder** for seamless user experiences.
- Developed **Triggers** and **Queueable Apex** classes for event-driven and asynchronous processing.
- Built complete, modular applications within the Salesforce ecosystem.
- Utilized **SOQL (Salesforce Object Query Language)** to query and manipulate large data sets efficiently.

Salesforce Developer

Grupo Salinas

Feb. 2022 – Aug. 2022 | Mexico City, México

Development of custom Salesforce interfaces and back-end logic:

- Created dynamic and responsive user interfaces using **Aura Components**.
- Developed **Apex controllers** to handle complex business logic and data flows.
- Implemented **Flows** for process automation and business logic orchestration.
- Wrote optimized **SOQL queries** for data access and manipulation in custom components.

Jr. Salesforce Consultant

Fast Cloud Consulting

Aug. 2019 – Feb. 2020 | Mexico City, México

Salesforce configuration and customization:

- Creation of custom fields and objects.
- Implementation of Process Builder for process automation.
- Development of validation rules to ensure data integrity.

EDUCATION

Bachelor in Mechatronic Engineering

Universidad Politécnica de Chiapas

2012 – 2016 | Chiapas, Mexico

M.Sc. Astrophysics

Instituto de Astronomía-UNAM

2017 – 2020 | Mexico city, México

Ph.D. Astrophysics

Instituto de Astronomía-UNAM

2020 – current | Mexico city, México

PUBLICATIONS

Tesis

- K. L. Mendoza, *Análisis estadístico de la correlación co-espacial de neutrinos de altas energías de ICECUBE posibles fuentes en rayos gamma*. 2020.

Journal Articles

- K. O. C. López, A. M. Watson, W. H. Lee, R. L. Becerra, and M. Pereyra, "An evaluation of the BALROG and RoboBA algorithms for determining the position of Fermi/GBM GRBs,", vol. 531, no. 2, pp. 2775–2784, Jun. 2024. DOI: 10.1093/mnras/stae1255. arXiv: 2404.19732 [astro-ph.HE].

PROJECTS

GRB Localization Algorithm Comparison

Ph.D. Project, Instituto de Astronomía - UNAM

2020 – Current Mexico City, México

- Web scraped observational data from the **Fermi** space telescope using **Selenium** and **Requests**.
- Built custom **ETL pipelines** with **Pandas** to process GRB localizations from two detection algorithms.
- Performed statistical analysis to evaluate and compare localization accuracy across methods.
- Results published as **first-author paper** in *Monthly Notices of the Royal Astronomical Society (MNRAS)*.

Neutrino–Gamma-ray Correlation Study

M.Sc. Thesis, Instituto de Astronomía - UNAM

2017 – 2020 Mexico City, México

- Developed an **astrophysical correlation analysis** between high-energy neutrinos (from ICECUBE) and gamma-ray sources.
- Applied the **Kolmogorov–Smirnov test** to analyze spatial distributions using **Pandas**, **NumPy**, and **Astropy**.
- Thesis: *"Análisis estadístico de la correlación co-espacial de neutrinos de altas energías de ICECUBE con posibles fuentes en rayos gamma"*.

Luminosity Distribution from SDSS Data

M.Sc. Coursework Project, Instituto de Astronomía - UNAM

2018 Mexico City, México

- Processed **Sloan Digital Sky Survey (SDSS)** data to compute luminosity distributions of extragalactic sources.
- Implemented data processing and statistical analysis workflows using **Python** and **Pandas**.

LANGUAGES

- English (TOEFL-ITP score of 510).
- Spanish (Native).