

# Adrian Pineda Sánchez

 [AdrianPinedaSanchez](#) |  [Adrian Pineda Sánchez](#) |  [A00834710@tec.mx](mailto:A00834710@tec.mx) |  +52 8681825134

## EDUCATION

Aug 2021 - Present	Bachelor's Degree at <b>Instituto Tecnológico de Monterrey</b> B.S Data Science and Mathematics Engineering (GPA: 97.82/100.0) Minor in Advanced Artificial Intelligence for Data Science Expected Graduation: Jun 2025
Aug 2018 - May 2021	<b>Centro Universitario del Noreste</b> Valedictorian & High School Diploma (GPA: 10.0/10.0)

## EXPERIENCE

<b>Cemex Ventures</b>	Intern in Object detection in Plants with Deep Learning and AI	Oct 2023 - Present
I lead and develop a Power Apps application for monitoring Cemex fleet vehicles, collaborating with divisions in Germany, Spain, Colombia, and Mexico. Using SQL in Azure with Power Automate and SharePoint, I achieved 99.6% efficiency improvement. I develop AI and ML models in Python, including LLMs and NLP with OpenAI, Ollama, and LMStudio, for Cemex's web app and global plants predictions.		
<b>ADUX-Vamos Alto Apodaca</b>	Olympic and Academic mentor in Mathematics	Feb 2023 - Aug 2024
ADUX is an internationally recognized program by UNESCO that addresses educational backlog in basic and secondary education (+2,400 students) I work as an Olympic and Academic mentor in Mathematics.		
<b>On Campus Intern</b>	HR Data Analyst for Tecnológico de Monterrey	Feb 2023 - Jul 2023
I automated scheduling and availability for Business and Humanities faculty, managing databases in Excel, Sheets and Google Data Studio, achieving a 75% efficiency improvement and 95% effective automation.		

## PROJECTS [\(CLICK FOR COMPLETE PORTFOLIO, PROJECTS AND CERTIFICATIONS\)](#)

<b>2024</b>	Interface for Data Capture, Analysis, and Encryption for <b>Casa Monarca</b> (Power Apps, SQL, Python).
<b>2024</b>	TDA-PCA in CNNs with ML for Gravitational Wave Prediction in Time Series (Python).
<b>2023</b>	Implementation and Analysis of CNNs for Fashion Images Detection and Categorization (Python).
<b>2023</b>	Optimization for selection of routes and trip parameters for <b>Cemex</b> Carriers (Python and GAMS).
<b>2023</b>	Statistical analysis for <b>SIMA</b> , about concentrations of polluting gases in Nuevo León (R).
<b>2023</b>	Automation in selection of carrier trips for <b>Ternium</b> using ML and Statistical techniques (Python).

## LEADERSHIP AND AWARDS [\(CLICK FOR BRIEF PORTFOLIO PRESENTATION\)](#)

<b>2024</b>	HackMty <b>Capital One</b> : Fraud Detection Model with LSTM model optimized with Optuna, achieving 97.2% recall, and integrated Crew AI assistant with OpenAI and Ollama for process automation and insights.
<b>2024</b>	Finalist Datathon <b>Hey Banco</b> : Sentiment analysis system for tweets using transformers and fine-tuning models with OpenAI for generating insights and adjusting brand tone, leveraging advanced NLP techniques.
<b>2023</b>	3rd place Datathon <b>Hey Banco</b> : Expense prediction model by client using Random Forest, optimized with GridSearch, achieving 97% accuracy in monthly and category predictions for customer financial care.
<b>2022</b>	International Most Outstanding Country Delegation at <b>Knovva Academy Model G20</b> .
<b>2021</b>	<b>Lideres del Mañana</b> Scholarship (8th Gen) in <b>Tec de Monterrey</b> given to <1% of applicants (+20,000).

## SKILLS

Language	Experience	Language	Experience	Program	Experience
Python	3.5 years	SQL	2 years	Power Apps, Automate,BI,Pages	1.5 years
MATLAB	2.5 years	GAMS, Prolog, C#	1 year	Nessus, Docker, DBeaver	1.5 years
R	2.5 years	Rest APIs, LLMs	1 year	Azure Data Studio, Linux/Ubuntu	1 year
C++	2 years	English	B2	Oracle Apex, MongoDB	6 months

### Libraries Proficiency

**Statistical and Data Analysis:** NumPy, Pandas, R, Matplotlib, ggplot2, Seaborn, SciPy, Statsmodels, SymPy.

**AI and ML:** Scikit-Learn, TensorFlow, PyTorch, LangChain, OpenAI, Crewai, Transformers, Streamlit(web).