Oscar Urenda

📞 +52 6673271279   @ Oscarjavierur@gmail.com

Education

TEC DE MONTERREY
B.S. in Data Science and Mathematics Engineering
📅 Jun 2024   📍 Guadalajara, Jalisco

UNIVERSIDAD AUTÓNOMA DE DURANGO
High school
📅 Jun 2019   📍 Culiacán, Sinaloa

Links
🐙 GitHub **OscarUrenda**
in Linkedin **OscarUrenda**

Coursework

RELEVANT SUBJECTS

TC1029 Computational Thinking and Programming
MA1031 Statistic Analysis
TC1030 Object-Oriented Programming
TC2004B Data Science Analysis
MA2004B Stochastic Optimization
TC2034 Modeling Learning with Artificial Intelligence
MA2015 Design of Bio-Inspired Mathematical Algorithms
TC2035 Neural Network Design and Deep Learning

Skills

PROGRAMMING
Python • R • PHP • C++ • HTML • SQL

MISCELLANEOUS
Shell • LaTeX • Tableau • Microsoft Office • Git • Minitab

Certificates

PYTHON DATA STRUCTURES
University of Michigan

STRUCTURED QUERY LANGUAGE SQL
University of Michigan

Projects

STREAMING PLATFORM SIMULATOR
Tec de Monterrey
📅 Sep 2020 – Dec 2020   📍 Culiacán, Sinaloa
- **Object-oriented programming (OOP)** project which consisted in a streaming library where you can query based on properties applying concepts like polymorphism, inheritance, composition and encapsulation.

CAPACITATED VEHICLE ROUTING PROBLEM
Tec de Monterrey
📅 Jan 2022 – Jun 2022   📍 Guadalajara, Jalisco
- Collaboration with Coppel to adjust the best route considering distances, number of packages, time windows and available vehicles through **Google API's** like Geolocation, Distance Matrix and Geocode.

IMAGE CLASIFICATION THROUGH CLASSIC AND NEURONAL METHODS
Tec de Monterrey
📅 Jan 2021 – Jun 2021   📍 Guadalajara, Jalisco
- Clasification of 3 different images databases with support vector machine**(SVM)**, K-nearest neighbor**(Knn)**, multilayer perceptron models**(MLP)**, self-organizing maps and convolutional neural network**(CNN)**.

ROUTE DESIGN FOR ROBOT EXPLORER ON MARS
Tec de Monterrey
📅 Sep 2020 – Dec 2020   📍 Guadalajara, Jalisco
- Route design for robot explorer on Mars using **A*** algorithm.

ANALYSIS OF THE CONSEQUENCES OF DIFFERENT POLLUTANTS IN PERIODS OF DROUGHT
Tec de Monterrey
📅 Sep 2022 – Dec 2022   📍 Guadalajara, Jalisco
- Collaboration with Monterrey Environmental Monitoring System (SIMA) to discover patterns in the correlation between pollutants, weather conditions and drought.
- Applying techniques like lineal **regression analysis**, principal components analysis**(PCA)** and classifiers like Support vector machine **(SVM)**, K- nearest neighbor **(Knn)**, Linear discriminant analysis **(LDA)**, Decision tree **(DT)**, RandomForest **(RF)** y Naive Bayes **(NB)**

COVID 19 COMORBILITY ANALYSIS
Tec de Monterrey
📅 Sep 2020 – Dic 2020   📍 Guadalajara, Jalisco
- Python and database usage to determine if having high blood pressure and kidney failure increase death risks in patiens with Covid 19 through statical inference techinques.