Guadalajara, Mexico (+52) 33 3131 9619

Mauricio Alejandro Villalobos Carrillo

GitHub: MAlejandroVC linkedin.com/in/mavc2000

Education

Guadalajara, Mexico ITESO Aug 2020 | Jul 2024

• Bachelor in Computer Systems Engineering.

Leeuwarden, Netherlands NHL Stenden Hogeschool

Aug 2022 | Jan 2023

• Minor in Computer Vision and Data Science.

Experience

Jr. Data Scientist Multiburó Jan 2024 – Present

Guadalajara, Mexico

- Redesigned and refactored backend API using Django Ninja, greatly enhancing code quality.
- Preprocessed data to ensure consistency and accuracy in machine learning model predictions.
- Efficiently integrated data from external APIs, optimizing processing with JSON-style dictionaries.

Technology Teacher

CEDI

Mar 2023 - Jun 2024

Guadalajara, Mexico

- Taught Excel, covering basics to advanced topics like dynamic tables, dashboards, and macros.
- Educated students in Fundamentals of Robotics using LEGO-style kits, focusing on creative problem-solving through design, building, and block-style programming.
- Led Arduino Robotics classes, guiding students in building electronic circuits and programming robots to tackle challenges using sensors and actuators.

Computer Vision Researcher

OD Security

Aug 2022 – Jan 2023

Leeuwarden, Netherlands

- Researched, developed, and trained a machine learning model using YOLOv5 architecture to identify anomalies and contraband in human x-rays.
- Implemented data augmentation techniques to enhance model performance and accuracy.
- Authored and presented a research paper at a Computer Vision & Data Science Symposium.

Projects

- Quetzal Network Designed and prototyped two award winning devices and an app to prevent kidnapping and aid in the rescue of victims. Arduino, React, Mesh Networks
- Celestial App Designed and programmed a mobile app that allowed users to discover and learn about celestial object with information gathered from NASAs official API. Dart, Flutter, Firebase
- AWS Note App Note taking webpage that allowed users to store and synchronize their thoughts utilizing a suite of AWS services. Cognito, App Sync, Dynamo DB, Cloud Front, Amazon S3

Technical Skills

- Languages: Python, C, C++, Java, JavaScript, RISCV Assembly, SQL, Dart
- Frameworks: TensorFlow, Scikit-learn, Keras, Django, Flutter, Node.js, Angular
- Data Science: Dataset Management, AI Model Training, Data Preprocessing, Data Augmentation