Eduardo Venegas

Computer Science Student



EDUCATION

Computer Science Exchange Student Universität Ulm

10.2022 - 09.2023 Ulm. Germany

Awarded a full scholarship from the DAAD. Computer Vision II | Autonomous Driving and Assistance Systems | Statistics

Bachelor in Computer Science Engineering Tecnológico de Monterrey GDL

08.2019 - 12.2023

- 60% tuition scholarship due to academic merit. Won first place in the Campus Engineering Expo.
- Member of the Algorithm Club school group. GPA: 97.51 (Achieved one of the best GPA 4 times)

Technologist in Automatic Control and Instrumentation CETI Colomos

08.2015 - 06.2019 Guadalaiara, Mexico

TensorFlow

Chakra

Thesis Project: Built an Autonomous Tennis Machine from scratch using electronic components and a PLC.

SKILLS

Languages **JavaScript** TypeScript Python R C++ Matlab

React Native | NextJS Lib/Frameworks React

Angular AWS CI/CD Git Docker Monitoring Grafana Prometheus Tools

Ionic

WORK EXPERIENCE

Data Analyst Intern BMW Group

03.2023 - 09.2023 Munich, Germany

- Developed a high-accuracy algorithm for detecting external battery replacements.
- Found root cause to missing database values, created a new processing pipeline and increasing service demand by 62%.
- Designed a Streamlit dashboard to adjust prediction model parameters and obtain real-time output (<8 seconds).
- Configured cloud-based environments for working with PySpark.

Site Reliability Engineer & Developer Xira

01.2022 - 04.2021 Remote

Node

Jest

- Maintained several servers, monitor services and improved engineering processes.
- Developed a platform to manage the client's APIs with payments and a subscription system using NextJS, Stripe and Docker. Maintained a text analytics model to categorize messages for clients.

Production Engineer Fellow Major League Hacking & Meta

06.2021 - 09.2021

- One of the 120 selected students from a total of 20,000. Automated a CI/CD workflow using GitHub Actions to deploy changes to a production server. Monitored the app using cAdvisor, Prometheus and Grafana.
- Served it in a Docker container, guaranteeing 99.99% uptime on a AWS EC2 instance.

Data Engineer Jiit Technologies

03.2021 - 06.2021Remote

Created an analysis pipeline API for custom sales data using Flask, NumPy, SciPy and Prophet.

Full Stack Developer Jiit Technologies

10.2020 - 06.2021 Remote

Developed from scratch an ERP platform to organize inventory, human resources, shipments, income/expenses. Angular.

PROJECTS

See Your World Ionic Angular Docker TensorFlow CNN & RNN

- Won 2nd place in HackMTY. Developed an app that lets people with limited vision see by using an Image Captioning DL model, Ionic Angular, a translation API and a Text2Speech library. Works in 11 languages.
- Built the model with TensorFlow, a CNN-RNN architecture and hosted with Flask, Docker and Google Cloud VM.

DevUp CI/CD | Docker | React | AWS | Monitoring

- Won MLH Production Engineering Hackathon. Platform to help developers find teammates for side projects.
- Used Ionic React, Docker, AWS EC2, NGINX, Flask, PostgreSQL, CI/CD, cAdvisor, Grafana and Prometheus.

Room System Angular Firebase I IoT Deep Learning

- Won 1rst place in the Campus Engineering Expo. Developed an app to control IoT home devices (lights, doors...).
- Used Angular, Firebase, a NodeMCU board and Keras to predict the climate.

CERTIFICATIONS

Mathematics for Data Science Specialization

Data Science Professional Certificate

Python Data Science Professional Certificate

Google IT Support Specialization

Deep Learning Professional Certificate

Higher School of Economics - 2021

HarvardX - 2020

IBMX - 2020

IBMX - 2020

Coursera - 2020

LANGUAGES

Spanish Native **English** Fluent German C1

