Eduardo Venegas

Computer Science Engineer



EDUCATION

MSc. Data Science and Artificial Intelligence Universität des Saarlandes 10/2024 – 09/2026 Saarland, Germany

Coursing degree. Machine Learning | Deep Learning | Data Mining | Big Data | NLP | Computer Vision

BSc. Computer Science Tecnológico de Monterrey GDL

08/2019 – 12/2023 Zapopan, Mexico

- Grade: 94.6 / 100. Five times best software engineering GPA. 60% tuition scholarship due to academic merit.
- Strong foundation in mathematical modelling, statistical methods, and computational techniques.

Computer Science Exchange Student Universität Ulm

10/2022 – 09/2023 Ulm, Germany

• Full scholarship recipient from DAAD. Computer Vision II | Autonomous Driving and Assistance Systems | Statistics

Technologist in Automation, Robotics and Instrumentation CETI Colomos 08/2015 - 06/2019 Guadalajara, Mexico

• Thesis Project: Built an Autonomous Tennis Machine using power & digital electronics and a microcontroller.

SKILLS

Languages

JavaScript TypeScript Python R C++ C Matlab SQL

Lib/Frameworks React React Native NextJS Angular Ionic Flask Node Jest TensorFlow Chakra

Tools

Linux Docker AWS CI/CD Git Monitoring Grafana Prometheus Arduino

WORK EXPERIENCE

Cloud Software Engineer Oracle

11/2023 – Present Guadalajara, Mexic

- Worked on the Oracle Cloud Infrastructure in the team of Big Data Service in Oracle Analytics.
- Developed the console for managing and deploying big data clusters. Implemented pipelines for automation and testing.

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 for adjusting prediction model parameters and obtaining a real-time output (<8 seconds).
- Configured cloud-based environments for working with PySpark.

Site Reliability Engineer & Developer Xira

01/2022 – 04/2021 Remote

- Managed over 10 servers, monitored services and enhanced engineering processes.
- Built a platform to manage client APIs, integrating payments and subscription systems using NextJS, Stripe and Docker.
- Maintained a **text analytics** model for message categorization, benefiting clients.

Fellow - Production Engineer Major League Hacking & Meta

06/2021 - 09/2021 Remote

- Selected among 120 out of 20,000 applicants. Automated **CI/CD** workflow using **GitHub Actions** for efficient deployment to a production server. Implemented app monitoring with **cAdvisor**, **Prometheus** and **Grafana**.
- Ensured 99.99% uptime by hosting it in a Docker container on an AWS EC2 instance.

Data Engineer Jiit Technologies

03/2021 - 06/2021 Remote

Designed a custom sales data analysis pipeline API using Flask, NumPy, SciPy and Prophet.

Full Stack Developer Jiit Technologies

10/2020 - 06/2021 Remote

Built an ERP platform from scratch to manage inventory, human resources, shipments, income and expenses. Angular.

PROJECTS

See Your World | Ionic Angular | Docker | TensorFlow CNN & RNN

- Crafted a hackathon award-winning app for the visually impaired, supporting 11 languages.
- Engineered Image Captioning DL model with TensorFlow, deployed using Flask, Docker, and Google Cloud VM.

DevUp CI/CD Docker React AWS Monitoring

- Secured victory in 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.

CERTIFICATIONS

Mathematics for Data Science Specialization Higher School of Economics - 2021

HarvardX - 2020

Data Science Professional Certificate

Python Data Science Professional Certificate

Deep Learning Professional Certificate

Harvarax - 2020

IBMX - 2020

IBMX - 2020

LANGUAGES