

Eduardo Venegas

Computer Science Engineer

 lalohdez77@gmail.com  lalovene.netlify.app
 Saarbrücken, Germany  [eduardo venegas](#)
 [LaloVene](#)



EDUCATION

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

- Coursing degree. ML | Deep Learning | NLP | Machine Translation | Image Processing | 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 and Robotics CETI Colomos

08/2015 – 06/2019 Guadalajara, Mexico

- Thesis Project:** Built an Autonomous Tennis Machine. Electronics | Robotics | Industrial Automation | Electricity | PLCs

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

Data Scientist Werkstudent August-Wilhelm Scheer Institute

10/2024 – Present Saarbrücken, Germany

- Designed a **RAG** system using **LangChain**, **HuggingFace**, and **IR techniques** for enhanced data retrieval precision.
- Optimized autoencoder model via **Federated Learning** enabling distributed training across different devices.

Cloud Software Engineer Oracle

11/2023 – 10/2024 Guadalajara, Mexico

- 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**.

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 using Docker in an **AWS EC2** instance. Implemented app monitoring with **Prometheus** and **Grafana**.

Full Stack & Data Engineer Jiit Technologies

10/2020 – 06/2021 Remote

- Designed a custom sales data analysis pipeline API using **Flask**, **SciPy** and **Prophet**.
- 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*
- Data Science Professional Certificate *HarvardX - 2020*
- Python Data Science Professional Certificate *IBMx - 2020*
- Deep Learning Professional Certificate *IBMx - 2020*

LANGUAGES

Spanish Native ●●●●●●●●
English C1 ●●●●●●●●
German C1 ●●●●●○