DR. SALVADOR SALAZAR

Senior | Staff Engineer

Data | Machine Learning | AI

Munich, Germany • linkedin.com/in/ssalazaralbornoz • https://github.com/ssalb

Data and Machine Learning Engineer with a Ph.D. in Astrophysics, driving innovation in B2B, Al-powered SaaS products. Architect of large-scale data processing platforms handling millions of daily events. Experienced in developing production-ready ML and Al services, including LLM-based agents. Proven track record in designing robust systems using Kafka, Airflow, ClickHouse, and Kubernetes. Combines deep technical expertise with cross-functional leadership to deliver comprehensive data and Al solutions from conception to optimization.

AI/ML System Architecture • Large-scale Data Processing • Leadership • Cross-functional Collaboration • Cloud-native Technologies • Mentoring

PROFESSIONAL EXPERIENCE

Userlane GmbH, Munich • Staff Engineer

01/2024 - Present

Hands-on technical leadership across the entire data and Al infrastructure stack, while managing a diverse team of data engineers, data scientists, and ML engineers. Key responsibilities and achievements include:

- o Architecting and maintaining robust data processing platforms handling millions of daily events, utilizing **Python**, **Docker**, **Kubernetes**, and modern data technologies (**Kafka**, **Airflow**, **ClickHouse**, **PostgreSQL**).
- o Implementing and managing comprehensive CI/CD pipelines using **GitHub Actions**, incorporating automated code quality checks, testing, and deployment validation.
- o Building scalable AI services and infrastructure, including **LLM-based AI agents** and **ML models**, using **FastAPI** and cloud services.
- o Ensuring compliance with data protection regulations (GDPR) while maintaining system security and performance
- o Leading cross-functional collaboration with platform engineers, software engineers, PMs, and designers to deliver comprehensive technical solutions.
- o Defining technical strategy and roadmap for data and AI initiatives, focusing on scalability, reliability, and business impact.

Userlane GmbH, Munich • Lead Data Engineering & Analytics

02/2022 - 12/2023

Hands-on team and tech lead. Adapted Google's HEART framework to Userlane's B2B SaaS product, providing an analytics-based holistic view to customers on how their users are adopting their software tools. This analytics product today helps customers better understand their software landscape and optimize their ROI.

- o Managed the relations with external development service providers.
- o Hire and grow Userlane's own data team from scratch, distributed across the UK, Germany, and Poland.
- O Using AKS, Helm, Python, Apache Kafka, Airflow, ClickHouse, and PostgreSQL:
 - > Design and develop an analytics framework for adoption of software tools.
 - Design and develop a system to discover other web apps Userlane customer's employees use.
 - > Design and develop Userlane's DWH for internal use from scratch.

Designing and building the company's self-service data infrastructure. Ad-hoc analysis and algorithm development.

- o Building data pipelines and data models using **Python**, **Airflow** and **Google BigQuery**.
- o Prototyped a web based application to function as Data Catalog.
- o Multiple ad-hoc analyses using pandas and scikit-learn.

BayWa IT GmbH, Munich • Team Lead Data & Analytics

09/2020 - 12/2020

Champion the modernization of data related infrastructure including cloud and real-time analytics, as well as the development of machine learning based applications.

- o Managed a team of 12 engineers, analysts and project managers.
- o Developed a concept for transforming legacy data transport and reporting to a distributed, event-based architecture, evaluating multiple cloud providers.

Zeppelin GmbH, Garching • (Lead) Data Scientist

07/2018 - 08/2020

"Founding" Data Scientist for the Zeppelin Holding company, later leading a small team within the organization. Developed first machine learning applications, as well as workshops to uncover potential data science use cases in all of Zeppelin strategic business units.

- o Tech lead for a team of data scientists, data engineers and product owners.
- o Developed the first machine learning based use cases, most notably an oil sample classifier.
- o Build and maintain the infrastructure for ML-based services using CircleCI, AWS' ECS, EC2, ECR, and Route 53.

Cliqz GmbH, Munich • Data Scientist

12/2016 - 06/2018

Help developing a privacy-first intent detection system for serving personalized ads without compromising personally identifiable information.

- o Data collection, analysis and algorithm development using Apache Spark and Databricks.
- o Mentored MSc. students in data analysis and scientific writing.

Max Planck Institute for extraterrestrial physics, Garching • Researcher

09/2012 - 08/2016

As a post-graduate, later post-doctoral researcher, I carried out independent, novel research in observational cosmology. I actively participated in international collaborations formed by research institutions across Asia, Europe and North America, publishing a number of papers in highly recognized scientific journals.

EDUCATION

Dr. rer. nat. • LMU Munich, Munich

04/2016

Graduated with cum-laude.

Lic. in Astronomy • *PUC Chile, Santiago* Graduated with *maximum distinction*.

08/2012

LANGUAGES

English - German - Spanish