



# Maximilian Ritter

IT Freelancer - AWS, Data, DevOps

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## { } Major Tech Skills

### AWS

*Analytics, Integration, Monitoring, Storage, Networking, Cost, Compute, Serverless, Security*

### Data

*ETL, SQL, Databases, Data Warehousing, Data Lake, PySpark, Databricks, EMR, Athena, Glue, Data Pipelines*

### DevOps

*Terraform, AWS CDK, Kubernetes, GitOps, Serverless Framework, CI/CD, Testing, Tracing, Logging*

## 📁 Major Project Experience

03/2022 - 08/2022

### Cloud & Big Data Engineer

*Large Company in Media Group Industry (DE, Confidential)*

Max helped creating the company-wide identity and data management platform based on Golang, Microservice architecture and Kubernetes infrastructure. He also worked in the Data Engineering department to build reliable ETL pipelines using Databricks with dbx and PySpark on AWS.

#### Technologies:

- Event-Driven Microservice Architecture on EKS (Golang, Kafka, Terraform)
- Observability (Prometheus, Grafana, fluentd, Jaeger, Istio, ES, Kibana)
- GitOps / CICD (Gitlab, Tekton, Helm, Kaniko, Starboard)
- ETL Pipelines (PySpark, Databricks, S3, Delta Tables)
- AWS (S3, SQS, MSK, RDS) and Storage (Redis, MongoDB, PostgreSQL)

08/2021 - 02/2022

### Cloud & DevOps Engineer

*OEM Company in Automotive Industry (DE, Confidential)*

Max worked in a team of Cloud Engineers to implement a highly scalable and reliable infrastructure based on cloud-native technologies. The services provide smart insights based on customer data and machine learning.

#### Technologies:

- AWS (Glue, Athena, Step Functions, Sagemaker, S3, VPC, CloudWatch)
- Infrastructure-As-Code with CDK (Typescript) and Terraform
- Event-Driven Microservice Architecture (Python, Kafka)
- Services with Kubernetes (EKS on EC2), ECS on Fargate and Lambda
- CI/CD (GitHub Actions, AWS CodePipeline, AWS CodeBuild)
- Data Pipelines / ETL (PySpark and Python on EMR and Glue)

- 03/2021 - 07/2021 **Cloud & Big Data Engineer**  
*Medium-sized Startup in Climate Industry (CH, Confidential)*  
 Max implemented a full-stack data processing and analytics platform using modern cloud technologies and Apache Spark on Databricks. He also created a low-code UI solution to allow workers to annotate the data.
- Technologies:**
- Microsoft Azure (VMs, Data Lake, Event Hub, AD, Synapse)
  - SQL Database (Azure PostgreSQL, TimescaleDB)
  - Data Pipelines / ETL (PySpark on Azure Databricks)
- 08/2020 - 02/2021 **Cloud & DevOps Engineer**  
*Medium-sized Company in E-Commerce (DE, Confidential)*  
 Max facilitated the creation of a blueprint infrastructure-as-code architecture for migration from on-premise into the AWS cloud using Terraform. He utilized the Serverless Framework and AWS CDK to improve the development and deployment of the various microservices.
- Technologies:**
- AWS (Networking, VPNs, Security, Account Setup, Lambda, DMS, RDS)
  - Serverless Functions (Python, Serverless Framework)
  - Terraform (Terraform) and CDK with Typescript
- 07/2019 - 07/2020 **Cloud & IoT Engineer**  
*ParkDepot GmbH (DE, Startup in Mobility Industry)*  
 Max founded the company together with four co-founders in 2019. Starting from scratch, he developed a low-cost hardware system and a scalable backend on AWS to process and analyze the device data in realtime.
- Technologies:**
- AWS (Serverless, Containers, ETL, Database, Data Warehouse)
  - Infrastructure-as-Code (Terraform, AWS CDK, Pulumi)
  - Deep Learning (Python, Tensorflow, TensorRT) and Computer Vision
  - Edge Computing (Nvidia Jetson, ARM, C++, Embedded Linux)
- 03/2018 - 06/2019 **Embedded & IoT Engineer**  
*ParkHere GmbH (DE, Startup in Mobility Industry)*  
 Max developed an authentication terminal for corporate parking lots using ANPR technology and a radar based system for on-street parking spaces. As a team lead, he was responsible for Scrum and strategic product decisions.
- Technologies:**
- Deep Learning (Python, Tensorflow, OpenVino)
  - Internet of Things (OTA Updates, Cloud Connectivity, MQTT)
  - Embedded Linux and Microcontroller (C / C++, ARM, balenaCloud)
- 09/2017 - 02/2018 **Embedded & AI Engineer**  
*Bleenco GmbH (DE, Startup in Industrial Safety Industry)*  
 Max created the first stable version of a Deep Learning and Computer Vision based AI framework for industrial safety applications. He worked on predicting various human-centered features like emotions, intention, drowsiness and full-body pose estimation, running on low-cost edge devices.
- Technologies:**
- Deep Learning (Python, Tensorflow, Keras)
  - Computer Vision (OpenCV)
  - Edge Computing (Nvidia Jetson, C++)

## Certificates

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- CNCF Kubernetes and Cloud Native Associate
- AWS Data Analytics - Speciality
- AWS Developer Associate
- AWS DevOps Engineer Professional
- AWS re/Start Accredited Instructor
- AWS Solutions Architect Associate
- AWS Solutions Architect Professional
- AWS SysOps Administrator Associate
- Hashicorp Terraform Associate

## Working Experience

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- 08/2021 - present  
Munich, Germany
- IT Freelancer**  
Max is supporting his clients remotely in different industries and roles to deliver high-quality, state-of-the-art solutions to its customers.
- 08/2020 - 07/2021  
Munich, Germany
- IT Consultant**  
*Netlight GmbH*  
As a consultant, Max was working in the fields of Cloud, DevOps and IoT in hands-on roles to help leaders of the digital industry to be successful.
- 07/2019 - 07/2020  
Munich, Germany
- Co-Founder & CTO**  
*ParkDepot GmbH*  
Max co-founded the company in 2019. As a CTO, he was responsible for building the product and making long-term strategic decisions.
- 03/2018 - 06/2019  
Munich, Germany
- Lead Software Engineer**  
*ParkHere GmbH*  
Max developed different IoT solutions in the domains of smart parking. Apart from engineering, Max was leading the Embedded Systems team.
- 09/2017 - 02/2018  
Munich, Germany
- Software Engineer**  
*Bleenco GmbH*  
Max worked on a modular framework for human-centered safety solutions using computer vision and deep learning in the context of edge inference.

## Education

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- 2015 - 2017
- M. Sc. Embedded Systems**  
*University of Applied Sciences Pforzheim*  
Design and Implementation of Complex Embedded Systems
- 2011 - 2015
- B. Sc. Applied Information Technology**  
*University of Applied Sciences Ravensburg-Weingarten*  
Focus Areas: Automation Engineering and Information Networks

## Languages

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German (*native*) | English (*fluent*)

## Interests

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Reading | Travelling | Piano | Meditation