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Education: Computer science (diploma)
Focus Areas:

- Cloud and software architecture
- DevOps
- Amazon Web Services (AWS), Kubernetes, Azure
- Distributed systems
- Data Engineering

Social Networks:

- <https://www.linkedin.com/in/sam701>
- <https://github.com/sam701>

Projects

- 01/2022 – 12/2023** **Consulting on large scale data processing in cloud**
DevOps Engineer in Foundation Team, Big Loop
at CARIAD SE
- Tasks:
 - Designing and implementing Big Loop foundation platform
 - Designing and setting up highly available and scalable MQTT brokers
 - Setting up kubernetes cluster in Azure
 - Setting up networking for multiple AKS clusters
 - Securing kubernetes cluster using service mesh
 - Creating CI/CD and data pipelines
 - Maintaining Mender (OTA) in AKS
 - Designing and implementing distributed loosely coupled services using temporal.io
- Technologies: Go (golang), Azure, Kubernetes (AKS), linkerd, temporal, Azure DevOps, HiveMQ, Kafka, redpanda, Spark, Hive Metastore, Trino, JupyterHub, MLFlow, terraform, DCGM metrics collection, emqx, mender, chaos engineering
- 02/2019 – 12/2021** **Consulting on Cloud Migration**
Cloud Consultant / DevOps Engineer
at ProSiebenSat.1 Tech Solutions GmbH
- Tasks:
 - Supporting multiple teams on their way to AWS
 - Providing concepts and setting up logging and monitoring infrastructure for services in AWS and on-premise
 - Supporting operations and development departments on their movement to DevOps culture
 - Setting up cross account networking
 - Developing cross service authorization concept
- Technologies: Amazon Web Services (ECS, Fargate, VPC, Lambda, Direct Connect, Transit Gateway, Route53, API Gateway, Cognito, Secrets Manager, Security Hub, etc.), Terraform, Istio, Python, Bash, Docker, Vector.dev,

Filebeat, Logstash, Elasticsearch, Elastic Cloud, FileBeat, Ansible, Prometheus, Grafana, gitlab, Azure, Azure AD

07/2018 – 12/2018 Consulting on Cloud Based AI Projects

Cloud Consultant
at Siemens AG

- Tasks:
- Creating technical architecture concepts and PoC
 - Analysis and architecture of a service for machine learning (ML) inferences in AWS
 - Analysis of pattern matching algorithms and their application in cloud services
 - Analysis of approaches to distributed load balancing
 - Setup of distributed test system with ansible and packer

Technologies: Amazon Web Services, Tensorflow, R, python, Docker, Ansible, Packer, Terraform, gitlab, Java Boot, Spring 5, WebFlux

07/2017 – 06/2018 Creating access control system in AWS for secured objects

DevOps Engineer
at BlueID GmbH

- Tasks:
- Creating technical architecture concepts
 - Creating a docker cloud cluster based AWS ECS
 - Implementing micro services in Go
 - Implementing OAuth2 server with standard and custom flows
 - Implementing deployment pipelines in gitlab with terraform
 - Cloud infrastructure setup with ansible

Technologies: AWS (VPC, SG, ECS, ECR, EC2, CloudWatch, SSM, Aurora), Go (golang), Docker, terraform, packer, nomad, ansible, gitlab, concourse CI, prometheus, AlertManager, OpsGenie, OAuth2, Elasticsearch, Upsource, Agile development

04/2017 – 06/2017 Creating Car Dealer Stock Management System in AWS

DevOps Engineer
at AutoScout24 GmbH / Online Car Platform

- Tasks:
- Analysis and migration of systems from an internal datacenter into AWS cloud
 - Implementing micro services in Scala
 - Implementing deployment pipelines
 - Implementing micro service monitoring using DataDog, Kibana, Elasticsearch, CloudWatch

Technologies: AWS (S3, EC2, CloudFormation, CloudWatch, Kinesis Stream/Firehose, Lambda, DynamoDB, RDS, IAM, ECS, SSM), Scala, Play Framework, Apache Kafka, Aurora DB, Docker, Ruby, Elasticsearch, Kibana, Go.CD, Github, OpsGenie, DataDog, Agile development

04/2016 – 03/2017 Cloud Engine for car dealer statistics in AWS

DevOps Engineer
at AutoScout24 GmbH / Online Car Platform

- Tasks:
- Design and architecture of a statistics engine for car dealers
 - Agile coach in the team
 - Implementing micro services in Scala
 - Implementing deployment pipelines
 - Implementing micro service monitoring using Dashing, Kibana, Elasticsearch, CloudWatch
 - Creating Ops tools in Go

Technologies: AWS (S3, EC2, CloudFormation, CloudFront, CloudWatch, Kinesis Stream/Firehose, Lambda, DynamoDB, RDS, ElastiCache, IAM),

Scala, Play Framework, Apache Kafka, Docker, Go (golang), Ruby, Elasticsearch, Kibana, Dashing, Go.CD, Github, OpsGenie, DataDog, Agile development

- 07/2015 – 03/2016** **App Migration into AWS Cloud**
DevOps Engineer
at AutoScout24 GmbH / Online Car Platform
- Tasks:
- Migrating existing applications from data center into AWS cloud
 - Rewriting existing applications on Scala
 - Implementation of the build and delivery pipelines with Go.CD
 - Implementation of AWS CloudFormation stack templates for microservices
 - Implementation of the monitoring solution with dashing.io, Kibana and Elasticsearch
- Technologies: Scala, Play Framework, AWS(S3, EC2, CloudFormation, CloudFront, CloudWatch), Docker, Ruby, nginx, Elasticsearch, Kibana, Dashing, TeamCity, Go.CD, Github, Dashing, OpsGenie, Agile development
- 01/2014 – 05/2015** **Web App: User Profile and Company Settings**
Technical team lead, scrum master
at Mercateo Services GmbH / Commerce
- Tasks:
- Technical team lead
 - Analysis and design of business requirements
 - Design of REST interface
 - Setup of DevOps pipeline
 - Design and implementation of REST services with Jersey
 - Implementation of user interface with angularJS
 - Implementation of backend business services
- Technologies: Scrum, Java, JEE, JavaScript, AngularJS, HATEOAS, Mocha, PhantomJS, Git, JAX-RS, REST, Jersey Framework, JUnit, Node.js, Hibernate, JPA, Tomcat, Spring Framework, Eclipse, Oracle, Apache Cassandra
- 01/2013 – 12/2013** **B2B Basket**
Architect / Software Engineer
at Mercateo Services GmbH / Commerce
- Tasks:
- Domain design
 - Connecting external service suppliers via OCI and cXML
 - Implementation of OAuth2 interface for external service suppliers
 - ReImplementation of order inject interface
 - Maintenance of entire basket component
- Technologies: Java, JEE, JavaScript, AngularJS, OCI, cXML, OAuth2, NoSQL, Hibernate, JPA, JUnit, Git, Tomcat, Spring Framework, Guice, Eclipse, Oracle, Apache Cassandra, Selenium
- 09/2012 – 12/2012** **Combinatorial Basket Optimization**
Senior Software Engineer
at Mercateo Services GmbH / Commerce
- Tasks:
- Design of cluster microservices
 - Implementation of product group user interface
- Technologies: Java, JUnit, JavaScript, JQuery, Git, Tomcat, RPC, Tomcat, Microservices, Eclipse, Oracle
- 08/2011 – 10/2012** **Android Game: Zling**
Architect / Software Engineer
at Private Project

- Tasks:
 - Game design <http://zling.de>
 - Implementation of asset pipeline
 - Implementation of server component on CentOS with go (golang)
 - Coordination of theme designer, musician and programming
- Technologies: Java, OpenGL ES, Go, Python, Apache Ant, Eclipse, Blender
- 07/2011 – 08/2012 Article Matching Engine**
Architect / Software Engineer
at Mercateo Services GmbH / Commerce
- Tasks:
 - Requirement analysis for article grouping
 - Design and implementation of component „Article Matching Engine“
 - Processing article catalogs in BMEcat format
 - Setup of DevOps pipeline
 - Implementation of monitoring component
- Technologies: Java, Apache Ant, JUnit, NoSQL, Git, BMEcat, Hibernate, JPA, Microservices, Eclipse, Oracle, PostgreSQL
- 01/2010 – 06/2011 Web Based Patent Management System**
Architect / Software Engineer
at pol GmbH / IT Service Provider
- Tasks:
 - Requirement analysis
 - Design and Implementation of user interface in GWT with Sencha GXT
 - Setup of DevOps pipeline with Jenkins/Hudson
 - Testing linux cluster administration
- Technologies: Java, J2EE, GWT, Sencha GXT, REST, Git, Hibernate, JPA, TestNG, Arch Linux, Jenkins, Microsoft SQL Server, Continuous Integration, Eclipse
- 10/2008 – 12/2009 Web App: Price Management for Sales Department**
Architect / Software Engineer
at pol GmbH / IT Service Provider
- Tasks:
 - Requirement analysis of price management tools
 - Design and Implementation of web UI with jWic, Velocity
 - Implementation of persistence tier in backend with Hibernate
 - Creating Reports with JasperReports
- Technologies: Java, J2EE, Apache Maven, jWic, Velocity, JasperReports, Hibernate, JPA, Tomcat, JavaScript, Eclipse
- 09/2007 – 09/2008 Authentication Server**
Senior Software Engineer
at Softcon AG / IT Service Provider
- Tasks:
 - Design of authentication system based on PKCS12 certificates
 - Implementation of authentication server
 - Connecting authentication server to backend with JNI
- Technologies: Java, Derby, Bouncycastle, Tomcat, JMS, JNI, C++, SVN, Eclipse, Oracle
- 03/2006 – 08/2007 Mobile Payment System**
Softwareentwickler
at Softcon AG / IT Service Provider
- Tasks:
 - Implementation of Mobile Payment System on Windows CE devices
 - Connecting of bluetooth portable printers on mobile devices
 - Implementing backend
- Technologies: Windows CE, Scrum, Derby, Bluetooth, Tomcat, SVN, PKCS12, Eclipse, Microsoft Visual Studio

08/2004 – 02/2006

Inventory Software

Softwareentwickler

at Softcon AG / IT Service Provider

- Tasks:
- Implementation of separate components in C++
 - Maintenance of entire inventory software suit
 - Maintenance of PL/SQL scripts

Technologies: C++, MFC, Microsoft Visual Studio, Oracle, SQL, PL/SQL

Skills

Programming Languages:	Go (golang), Zig, Rust, Elixir / Erlang, Java, Scala, JavaScript, Ruby, Python
Java Stack:	Spring Framework, Spring Boot, WebFlux, Reactive, JBoss, JNDI, JPA, Selenium, JUnit, TestNG, Apache Maven, Gradle
Rust Stack:	tokio, clap, juniper, SQLx, AWS SDK
Elixir / Erlang Stack:	OTP, Phoenix, Ecto, Absinthe
Scala Stack:	Play Framework, sbt, Akka, ScalaTest, Specs2
JavaScript Stack:	Svelte, Rollup, AngularJS, Typescript, Node.js, PhantomJS, Mocha, Browserify
Amazon Web Services:	EC2, ECS / Fargate, ELB / ALB, VPC, S3, CloudFormation, Kinesis Streams, Kinesis Firehose, Lambda, RDS, DynamoDB, CloudFront, CloudWatch, IAM, KMS, SNS, SSM, Secrets Manager, Security Hub
Cloud Infrastructure:	Docker, Kubernetes, AWS ECS, Nomad, Ansible
HashiCorp Stack:	Terraform, Consul, Vault, Nomad, Packer
Relational Databases:	PostgreSQL, MySQL, Oracle, Microsoft SQL Server, Apache Derby, Sqlite
NoSQL Databases:	DynamoDB, Apache Cassandra, HBase, Redis, MongoDB, Elasticsearch, Leveldb, Rocksdb
Operating Systems:	Linux (CentOS, Ubuntu, Arch, Raspberry Pi OS), Mac OS
Continuous Delivery:	Github actions, Gitlab pipelines, concourse CI, Docker
Cloud Tools:	Github, Travis CI, OpsGenie, CloudHealth, DataDog
Web Technologies:	AngularJS, WebGL, CSS, Less, Sass, REST, Ajax
Version Control Systems:	Git, Mercurial, SVN, CVS
IT Security:	Symmetric and asymmetric encryption, certificates, PGP / GPG, SSL / TLS, Bouncycastle, PKCS12, X.509
Networking:	VPN, DNS, DHCP, Routing, Iptables, P2P
Protocols:	IPv4 / IPv6, TCP, UDP, Multicast, HTTP / HTTPS, SMTP, FTP
Client-Server:	REST, GraphQL, XML, JSON, Protocol Buffers, CapnProto
Development Methodologies:	Agile, Scrum, Kanban, Behavior Driven Development, Test Driven Development

Certifications

- Scrum Master (2014)
- Certified JBoss Developer (2007)

Languages

- German (fluent)
- English (fluent)
- Russian (native speaker)
- Lithuanian (basics)