

## **Avinash Rode**

**Date of birth:** 15/01/1995 | **Nationality:** Indian | **Phone number:** (+49) 01718209574 (Mobile) |

Email address: rode.avinash007@gmail.com | Website: www.linkedin.com/in/avinash-rode | Website:

avinashrode.online | Address: Engsbachstrasse, 56, 57076, siegen, Germany (Home)

## DIGITAL SKILLS

DevOps | AWS | Docker | Kubernetes | Terraform | Jenkins | Ansible | Prometheus | Grafana Montironig | Azure | Azure Devops | Git | Python | intellectually curious | Microservices | Microsoft Fabric | Linux | Technical Support | Communication | Interpersonal Skills | Problem Solving

#### WORK EXPERIENCE

01/04/2024 - CURRENT Mülheim ad Ruhr, Germany

**DEVOPS/CLOUD ENGINEER SYNAXUS GMBH** 

- 1. Deployed various Azure resources using Terraform, ensuring efficient and scalable cloud infrastructure.
- 2. Implemented an end-to-end CI/CD pipeline in Azure DevOps. Integrated Azure Data Factory with Azure Repos to automate build and release processes, enhancing development efficiency.
- 3. Established a secure connection between on-premise SQL Server and Microsoft Fabric using an on-premises data gateway, ensuring seamless data integration.
- 4. Created data migration pipelines in Microsoft Fabric for Power BI reports, enhancing data transfer and report generation for business intelligence.
- 5. Integrated Prometheus for monitoring and Grafana for visualization, setting up comprehensive monitoring solutions that tracked system performance and provided actionable insights through custom dashboards.

01/01/2023 - 30/03/2024 Mülheim ad Ruhr, Germany

#### **WORKING STUDENT AS DEVOPS/CLOUD ENGINEER SYNAXUS GMBH**

- 1. CI/CD and Development Tools: Utilizes GitHub for version control, Jenkins for CI/CD orchestration, Docker Hub for container image management, and Terraform for infrastructure provisioning.
- 2. Cloud Infrastructure: Built on AWS, leveraging a VPC with private and public subnets, NAT Gateway and Internet Gateway for traffic management, and Route Tables for routing rules.
- 3. Kubernetes and Monitoring: Deployed using Amazon EKS with Application Pods for the core app, Prometheus Pods for monitoring, and Grafana Pods for visualization.
- 4. Traffic and DNS Management: Application Load Balancer (ALB) distributes traffic, while Amazon Route 53 and Hostinger DNS handle domain name resolution.

### EDUCATION AND TRAINING

31/08/2019 - 30/09/2023 Siegen, Germany

MASTERS IN MECHATRONICS Universität Siegen

01/08/2013 - 03/05/2017 Chennai, India

BACHELORS OF TECHNOLOGY Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Address 600062, Chennai, India

04/07/2012 - 26/05/2013 Latur, India

HIGHER SECONDARY SCHOOL CERTIFICATE Jawahar Navodaya Vidyalaya

## PROJECTS

28/04/2023 - 30/10/2023

## Masters Thesis - An Implementation of an Automated System for Fault Injection

- The thesis involves creating and automating a network simulation in OMNET++.
- The simulation utilizes scheduled files from SNAP, containing task details for efficient resource allocation.
- By implementing a self-organizing system, we aim to ensure timely completion of tasks.
- Evaluation involves running OMNeT++ simulations with diverse scenarios, including various fault injection types.
- The goal is to improve complex embedded real-time systems by integrating OMNET++, SNAP schedules, fault injection, and bash shell scripting
- · leveraging automation for code execution and data handling with minimal human intervention.

#### **Student Project - Process Automation**

- Automated the whole workflow in a single file for inexperienced users on the University Cluster.
- For example, the process of executing different codes, making changes in every single file, moving the files to the desired location, and deleting unwanted files.
- Executing codes manually will be a time-consuming and challenging task because there are thousands of files.
- Generated data JSON files from SNAP library using existing code with making changes to automate its topology and other parameters.
- Using a Genetic Algorithm used to optimize the JSON files for machine learning.
- Graph Neural Network used for training the data which was saved in pickle files.
- · Skills: Bash Shell Scripting, Python, Machine Learning.

## **CERTIFICATIONS**

28/11/2023 - 28/11/2026

#### **AWS Certified Developer - Associate**

- Deep understanding of managing the entire life cycle of applications.
- Proficiency in writing applications using AWS service APIs, AWS CLI, and SDKs.
- Utilization of containers for application development, is a crucial aspect of modern cloud computing.
- Develop, deploy, and debug cloud-based applications using Continuous Integration/Continuous Deployment (CI/CD) pipelines.
- Ability to develop applications that adhere to AWS best practices, ensuring high-quality and efficient cloud-based solutions.

Link https://www.credly.com/earner/earned/badge/7dac429a-8d65-4486-8c52-7e0cb0ce8f11

21/09/2022 - 28/11/2026

**AWS Certified Cloud Practitioner (CLF)** 

Link https://www.credly.com/earner/earned/badge/879ae22f-107d-40d8-a821-3f2684e54aaa

10/10/2022 - CURRENT

**Kubernetes Certified Application Developer (CKAD)** 

Link https://www.udemy.com/certificate/UC-c2c22e97-7590-4e13-a9ac-93e56d1f25b3/

12/10/2022

**Kubernetes Challenges** 

Link https://kodekloud.com/certificate-verification/86017B99AE-2D0F9B04D6BD-85F5EB3E86/

28/09/2022 - CURRENT

Docker for the Absolute Beginner - Hands On - DevOps

Link https://www.udemy.com/certificate/UC-f5c0c1b2-c4ee-4729-a0d4-c3bf09ad4df5/

29/10/2022

**Terraform for the Absolute Beginners** 

Link https://www.udemy.com/certificate/UC-e71f45de-e019-48df-9ddb-f64642fbf362/

18/10/2022

GitLab CI: Pipelines, CI/CD and DevOps for Beginners

Link https://www.udemy.com/certificate/UC-b1fcd0a4-65c7-4ad9-b0c0-8c35df64b2c8/

**GOETHE CERTIFICATE B1** 

Link https://drive.google.com/file/d/1ztrb1llxbWoAXtLHLvuiSXszDhLmCvwj/view?usp=sharing

02/02/2019 - CURRENT

**Model-Based Automotive Systems Engineering** 

Link https://courses.edx.org/certificates/69776c86ae094d11aef10da1792fd6b0

25/11/2019 - CURRENT

**Introduction to Engineering Simulations** 

Link https://courses.edx.org/certificates/4bd799ff138940a0a470257abde237ff

# LANGUAGE SKILLS

Mother tongue(s): MARATHI | HINDI | ENGLISH

Other language(s): **GERMAN**