Nithin Thadem

Nationality: Indian **Date of birth:** 28/02/1999 **Gender:** Male

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ABOUT ME

Professional Cloud DevOps engineer with 2.5 years of work experience with 1 year hands-on experience in Google Cloud Platform (GCP) and Amazon Web Services (AWS), Networking, Security, and monitoring. As a certified Google Cloud Platform Professional Cloud Architect, I am seeking to work in challenging roles in an organization that can provide me with growth opportunities.

WORK EXPERIENCE

Research Collaborator

Università degli studi di Catania [11/2021 – 01/2023]

City: Catania | **Country:** Italy

Firmware development engineer - Motor Control

ST Microelectronics [07/2022 – 01/2023]

City: Catania | **Country:** Italy

Intern at ST Microelectronics as a Firmware developer for Electric Drives.

System Validation and Connectivity Engineer

Electrolux Italia [05/06/2023 – 05/03/2024]

City: Porcia | **Country:** Italy | **Website:** https://www.electrolux.it | **Email address:** nithin.thadem@electrolux.com | **Name of unit or department:** Research and Development - **Business or sector:** Manufacturing

System Validation:-
The System validation test is to evaluate the Robustness and Reliability of new software's (CCF, FW, CFG or SELECTOR) introduced in current production software had not compromised the functionalities of the product.
Discover the potential bugs in CCF, FW, CFG and Related appliance software.
Main tasks:-
Create a Test plan which defines the kind of activity
Validation and verification of the software which is related to electronic boards.
Once a bug is identified during the testing phase is immediately notified to the test committee by using the related bug codes.
Issue management with other teams.

Connectivity:-
This activity is related to the Maintenance process consists in the exchange of data / information among machine cloud-APP which allow the user to receive on smart device indications on maintenance operations to be performed through push notifications and / or in-APP messages.
Main tasks:-
Serialisation of the appliance to enroll the appliance in cloud
Onboarding the appliance in the registered account(ex:-WM,WD &TD)
Controlling and Monitoring the APP and Appliance.
Testing the maintenance parameters.
Performing Smoke test on care tree
verify the wake and standby mode
Off-boarding the appliance from the registered account.

DevOps Freelancer

Freelance [04/01/2024 – 14/04/2024]

City: Porcia | **Country:** Italy

- Installing and updating the Jenkins plug-ins to achieve CI/CD.
- Responsible for installing Jenkins master and slave nodes.
- Created **Jenkins** CICD pipelines for continuous build & deployment and integrated **Junit** and **SonarQube** plugins in Jenkins for automated testing and for Code quality check.
- Integrated **SonarQube** with Jenkins for continuous inspection of code quality and analysis with SonarQube scanner for Maven.
- Managed **Sonatype Nexus repositories** to download the artifacts (jar, war & ear) during the build.
- Wrote playbook manifests for deploying, configuring, and managing components.
- Managing the working environments through configuration management tools **Ansible**.
- Worked on infrastructure deployment using **Terraform**.
- Creating and maintaining jobs in **Jenkins** for automated builds and deployments.
- **Shell script** to automate day-to-day activities.
- **GitHub actions**.
- **GCP** Cloud Run Services, Jobs, Cloud Scheduler, etc.

DevOps Engineer

Zemoso Technologies (Remote) [04/2024 – 09/2024]

City: Texas | **Country:** United States

- Design, implement, and manage infrastructure using tools like **Terraform** to automate the provisioning and management of cloud resources.
- Create and maintain Continuous Integration/Continuous Deployment (CI/CD) pipelines using tools like **Cloud Build**, **Jenkins**, or **GitLab CI** to automate the building, testing, and deployment of applications.
- Deploy and manage cloud resources, such as **Kubernetes clusters, databases**, and storage solutions, in environments like Google Cloud Platform (GCP).
- Set up and manage **Kubernetes** clusters to run and scale containerized applications efficiently.
- Deploy applications to Kubernetes clusters, managing resources like **Pods**, services, and ingress controllers to ensure reliable and scalable application performance.
- Implement and manage **IAM** (Identity and Access Management) policies, ensuring that services and users have the appropriate access levels to cloud resources.
- Write and maintain scripts for automating repetitive tasks, such as environment setup, backups, and monitoring.

DevOps Engineer

AiGot SRL (Onsite) [10/2024 – Current]

Address: Via Santa Maria 25, Pisa (Italy)

- Designed, implemented, and maintained infrastructure using **GitHub Actions, Terraform, and Kubernetes**.
- Managed **CloudRun services** for scalable and serverless application deployment.
- Configured **Cloudflare** for enhanced security, caching, and DNS management.
- Implemented and maintained **Docker** containerization strategies for efficient CI/CD workflows.
- Managed **DNS configurations** using **DNSimple** for seamless domain mapping.
- Deployed and managed **MongoDB Atlas** for high-availability and secure database hosting.
- Set up and maintained **Poste.io mail server** for self-hosted email services.
- Configured **Keycloak** for identity and access management (IAM) and Single Sign-On (SSO).
- Set up **Cloud Workstations** for remote development environments.
- Managed **IAM roles, policies, and permissions** to ensure secure access control.
- Configured **Secrets Manager** for secure storage and retrieval of sensitive credentials.
- Implemented **npm package management** for efficient dependency handling.
- Automated infrastructure provisioning and deployments with **Terraform and Kubernetes**.
- Optimized CI/CD pipelines using **GitHub Actions** for automated testing and deployment.

PROJECTS

[26/04/2024 – 16/06/2024]

DevOps Automation for a company called Thoughtly
Environment: Git, GitHub, Linux, SonarQube, Google Cloud Platform (GCP), Ansible, GitHub Actions, Terraform, cloud build, CloudRun Services.
Roles and Responsibilities:
✓ Configured Git with Jenkins and GitHub Actions to schedule jobs using the POLL SCM option.
✓ Installed and configured Git and communicated with repositories in GitHub. Collaborated with different teams to deploy application code into Dev, QA, and Staging environments.
✓ Installed and updated Jenkins plugins to achieve CI/CD.
✓ Responsible for installing Jenkins master and slave nodes.
✓ Created Jenkins CI/CD pipelines for continuous build & deployment and integrated JUnit and SonarQube plugins in Jenkins for automated testing and code quality checks.
✓ Wrote playbook manifests for deploying, configuring, and managing components using Ansible.
✓ Managed working environments through configuration management tools like Ansible.
✓ Worked with developers and testers to test the source code and applications through Jenkins and GitHub Actions plugins.
✓ Installation of Apache Tomcat and troubleshooting web server issues.
✓ Proficient in the deployment of WAR and EAR files in profiles and clustered environments.
✓ Administration and maintenance of servers using Red Hat Linux/CentOS 6 and 7.
✓ Installed and configured Ansible server for automation tasks.
✓ Implemented GCP solutions using Compute Engine, Cloud Storage, Persistent Disks, Cloud Load Balancing, Cloud DNS, Auto-scaling groups, and Cloud Functions.
✓ Built servers using GCP, creating and managing VM instances, configuring VPCs, setting up firewall rules, and using Google Cloud Deployment Manager for Infrastructure as Code (IaC).
✓ Designed, built, and deployed applications utilizing GCP services, focusing on high-availability, fault tolerance, and auto-scaling.
✓ Configured Cloud Load Balancers with different instance templates using Managed Instance Groups for Auto-scaling.
✓ Created and managed Cloud Storage buckets, implemented lifecycle policies, and set bucket policies (Read/Write).
✓ Created Persistent Disks and snapshots and attached them to Compute Engine instances.
✓ Set up and managed CI/CD workflows using GitHub Actions, including automated testing, building, and deployment of applications.
✓ Automated infrastructure provisioning and application deployment processes using Terraform and Ansible in GCP.
✓ Monitored and logged application performance using GCP's Stackdriver (now Google Cloud Operations Suite) for observability and alerting.
✓ Ensured security and compliance by implementing IAM policies, managing service accounts, and setting up firewall rules in GCP.

[01/06/2024 – 01/08/2024]

VPN Implementation Netbird and Testing (Internal Project)
Environment: Google Cloud Platform (GCP), Linux, Netbird, Compute Engine, SSH, Firewall, Stackdriver, Wireshark, Iperf, Gatling, Wazuh, OpenVAS.
Roles and Responsibilities:
✓ Deployed a GCP VM instance, ensuring optimal configuration for hosting the Netbird VPN server.
✓ Installed and configured Netbird on the GCP VM for secure VPN access.
✓ Set up and managed firewall rules to allow VPN traffic, ensuring secure connections.
✓ Facilitated secure client connections to the VPN by installing and configuring Netbird on client devices.
✓ Monitored VPN traffic and managed user access through GCP tools like Stackdriver.
✓ Regularly maintained the VPN server, ensuring continuous and secure service.
✓ **Functionality Testing**: Utilized Wireshark and Iperf to verify encryption and analyze network performance.

✓ **Performance Testing**: Used Gatling to simulate traffic loads and assess the VPN's performance under stress.
✓ **Reliability Testing**: Employed tools like Chaos Monkey to introduce failures and monitor system recovery.
✓ **Security Testing**: Conducted vulnerability scans using OpenVAS and implemented Wazuh for intrusion detection and monitoring.
✓ **Documentation**: Maintained detailed setup documentation, test reports, and continuously optimized the VPN configuration.

[02/08/2024 – Current]

Maintaining Infra for a company called Cellinobio

Environment: Google Cloud Platform (GCP), Kubernetes, Google Cloud Storage, Docker, Python, IAM, Compute Engine, Cloud Shell.

Roles and Responsibilities:

✓ Developed and deployed Kubernetes Pods, Jobs for automated file upload and download processes between Google Cloud Storage and Compute Engine instances using Python scripts.
✓ Configured and managed IAM roles and service accounts to ensure secure and appropriate access to Google Cloud Storage buckets.
✓ Designed and implemented Docker containers for running Python scripts, streamlining the process of managing GCS operations within Kubernetes.
✓ Troubleshot and resolved issues related to Kubernetes Job failures, including permission errors and script debugging, ensuring smooth and uninterrupted execution.
✓ Optimized the interaction between Google Cloud Storage and Kubernetes Jobs, improving the efficiency and reliability of file transfers in cloud environments.
✓ Utilized Google Cloud Shell for managing Kubernetes resources and monitoring Job executions, facilitating real-time deployment and debugging.

CERTIFICATIONS

[19/03/2024 – 19/03/2026]

Google Cloud Platform - Professional Cloud Architect

GCP Professional Cloud Architect certification is a valuable credential for individuals looking to demonstrate their expertise in designing and managing cloud solutions on the Google Cloud Platform. It requires a deep understanding of Google Cloud technologies and can design, develop, and manage dynamic solutions that leverage GCP's infrastructure.

Link: https://google.accredible.com/70e818c9-7f35-48b7-96f1-2764492d7f5e

EDUCATION AND TRAINING

Masters Degree

Università degli studi di Catania [10/2020 – 12/01/2023]

City: Catania | **Country:** Italy | **Website:** https://www.unict.it | **Field(s) of study:** Automation Engineering and Control of Complex Systems. | **Final grade:** 98/110 | **Thesis:** Fault Tolerant Symmetrical Six-Phase Induction Motor Drives.

This thesis will analyze the reliability aspects of motor drives, starting with the modeling of a Symmetrical Six-Phase Induction Machine. It will explore various solutions to provide fault tolerance to Symmetrical Six-Phase motor drives under different faulty conditions. Each solution has its advantages and disadvantages, with particular emphasis on post-fault current reconfiguration, which reduces inverter costs. By reconfiguring the amplitude and phase of the remaining currents, this method can maintain the same magnetomotive force (MMF) in both healthy and faulty conditions, thereby preserving torque, albeit with minor ripple in faulty scenarios.
After successfully passing all simulation tests, the concept was implemented in real-time using an STM32 microcontroller and IAR Embedded Workbench. The results demonstrated that the theory holds true in real-time applications.

Bachelors Of Engineering

Osmania University [09/08/2017 – 24/09/2020]

Address: Methodist College Of Engineering and Technology, Abids, Hyderabad , 500001 Hyderabad (India) | **Website:** methodist.edu.in

Diploma in Engineering

State Board of Technical Education and Training [14/07/2014 – 07/04/2017]

Address: VNR Vignana Jyothi college of Engineering and Technology, Bachupally, Hyderabad , 500090 Hyderabad (India) | **Website:** www.vnrvjiet.ac.in

DIGITAL SKILLS

GitHub, GitHub Actions / Keycloak / OIDC / CloudFlare / Google Cloud Run / Mongodb / Mongoose / Google Domains / Cloud workstations / AWS DevOps / IAC with Terraform / Devops: Docker, Jenkins / GKE/EKS / Version Control System (Git) / JIRA: working with Projects and Issues / Python / Linux (Terminal Commands, Bash/ Shell) / Cloud Watch / Prometheus / Grafana / Cloud Formation / Cloud Armour / WAF

LANGUAGE SKILLS

Mother tongue(s): Telugu

Other language(s):

English

LISTENING C1 **READING** C2 **WRITING** C1

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

Italian

LISTENING B1 **READING** A2 **WRITING** A2

SPOKEN PRODUCTION A2 **SPOKEN INTERACTION** B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

HOBBIES AND INTERESTS

Hobbies

➢ Group discussions.

➢ Reading books.

➢ Watching movies.

➢ Gym.

DECLARATION

Hello there,

I hereby declare that the above mentioned information is correct upto my knowledge and I bear the responsibility of correctness of the above mentioned particulars.

-Thadem Nithin.