Nithin Thadem

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

Phone: (+39) 3883531895 (Mobile) (+91) 7660040847 (Home) **Email address:** nithin.thadem@gmail.com **LinkedIn:** www.linkedin.com/in/thadem-n-790bb520a

Website: thademinfra.tech **Address:** Via delle Medaglie d'oro, 13, Pisa (PI), 56127, Pisa, Italy (Home)

ABOUT MYSELF

Certified Google Cloud Professional Cloud Architect with 3.5 years of experience in designing, deploying, and managing secure, scalable, and highly available cloud infrastructures on GCP and AWS. Proven expertise in Infrastructure-as-Code (Terraform), CI/CD automation (Jenkins, GitHub Actions), containerization (Docker, Kubernetes), and cloud security.

Experienced in managing mission-critical Kubernetes environments (8+ clusters) under high-availability requirements. Skilled in driving cloud migration, infrastructure automation, and system optimization initiatives with measurable impact. I bring a proactive, results-driven approach to problem-solving and project execution, consistently contributing to architectural discussions and operational excellence.

Seeking challenging roles in innovative organizations where I can leverage my technical depth and collaborative mindset to deliver resilient, scalable cloud solutions.

WORK EXPERIENCE

Adentis Italia (Consultant) Client: Millennium S.p.A. - Italy, Firenze

Senior DevOps Engineer

[01/12/2025 - Current]

Led organization-wide DevOps transformation at Millennium S.p.A., a healthcare software company, migrating from 100% manual deployment processes to fully automated CI/CD workflows for FHIR-compliant healthcare platforms (MilleAgenda, Millebook) serving medical practices across Italy.

Designed and deployed self-hosted Kubernetes infrastructure for on-premises healthcare application hosting, ensuring data sovereignty, GDPR compliance, and high availability. Managed production Kubernetes clusters handling critical healthcare workloads including patient scheduling systems, medical records management, and FHIR data exchange services.

Architected hybrid cloud infrastructure leveraging Azure services (App Service, API Management, Key Vault, Monitor) integrated with self-hosted Kubernetes, enabling secure healthcare data processing and interoperability. Implemented Azure API Management (APIM) for FHIR data exchange, ensuring HL7 FHIR standard compliance and secure healthcare system integration.

Implemented enterprise GitLab CI/CD pipelines from scratch, replacing manual deployment procedures and reducing deployment time by 85%. Created multi-stage automated pipelines for Angular/Ionic frontends with MSAL authentication and Spring Boot microservices backends. Configured GitLab Container Registry for private Docker image management and established GitLab Runner infrastructure for distributed pipeline execution.

Containerized complex healthcare application stacks using Docker, creating optimized multi-stage Dockerfiles for frontend and backend services. Built enterprise Docker image repository with versioning strategy, reducing image sizes by 60% and implementing automated security scanning and vulnerability management in CI/CD pipelines.

Implemented comprehensive monitoring and observability solutions using Azure Monitor, establishing centralized logging for distributed Kubernetes applications and creating real-time dashboards for deployment pipeline and infrastructure health visibility. Configured application performance monitoring and alerting, maintaining 99.9%+ uptime SLA for critical healthcare services.

Established security best practices including Kubernetes RBAC for least-privilege access control, GitLab CI/CD secret management with Azure Key Vault integration, container image vulnerability scanning, and GDPR-compliant infrastructure for healthcare data protection. Configured secure FHIR endpoints and MSAL-based authentication for healthcare provider SSO.

Enabled development team productivity, increasing deployment frequency from weekly manual releases to multiple automated deployments per day, eliminating deployment errors, and reducing infrastructure provisioning time from days to hours.

Technologies involved: Kubernetes, Docker, Helm, GitLab CI/CD (GitLab Runner, Container Registry), Azure (App Service, API Management, Key Vault, Monitor, DevOps), Terraform, Ansible, Spring Boot, Angular, Ionic, PostgreSQL, MSAL, OAuth, JWT, Spring Security, Apache Kafka, FHIR, Prometheus, Grafana, Bash scripting, Linux, Git, Maven, Swagger API

AiGot SRL (Onsite) - Italy, Pisa

Website: aigot.com

DevOps Engineer

[30/09/2024 - 30/11/2025]

Designed and managed multi-region, multi-environment cloud infrastructure on Google Cloud Platform (GCP) using Pulumi, supporting a SaaS platform for AI-powered content generation. Managed 3 GKE clusters (dev, staging, prod) across europe-west4 and us-central1, ensuring high availability, scalability, and compliance with enterprise standards.

Automated CI/CD pipelines using GitHub Actions and Cloud Build, enabling zero-downtime deployments and reducing release cycles by 40%. Deployed and maintained microservices architecture (e.g., analyst-agent, copywriter-agent, seo-agent) in Kubernetes with Helm and KEDA, scaling workloads dynamically based on demand.

Implemented custom Keycloak identity management with theme customization, deployed. Configured secure access control using GCP IAM, OIDC, and service account policies, enforcing least-privilege principles across environments.

Managed stateful services including:

Redis HA clusters (3-node setup in dev/staging/prod)

RabbitMQ for asynchronous task processing

Dagster for data pipeline orchestration

Optimized infrastructure costs through resource tagging, node pool autoscaling, and right-sizing of compute resources. Improved system observability with Stackdriver (Cloud Operations), Prometheus, Grafana, and custom health checks.

Monitored cluster health and performance using GCP Kubernetes Engine dashboards, identifying and resolving issues such as pod readiness failures and resource contention. Maintained 99.9%+ uptime across production workloads.

Technologies involved: GCP (Cloud Run, Secrets Manager, Cloud Workstations), Terraform, Docker, GitHub Actions, Cloudflare, DNSimple, MongoDB Atlas, Keycloak, Poste.io, IAM, npm, GCP, Pulumi, GKE, Kubernetes, Helm, KEDA, GitHub Actions, Cloud Build, Keycloak, Redis, RabbitMQ, Dagster, Prometheus, Grafana, IAM, Service Accounts, DNSimple, Poste.io, Git, Jira.

Freelance - Italy, Porcia

DevOps Freelancer

[04/01/2024 - 14/04/2024]

Built and optimized CI/CD pipelines for multiple clients using Jenkins and GitHub Actions, integrating SonarQube for code quality analysis and Nexus for artifact storage, reducing deployment failures by 25%. Automated infrastructure provisioning on GCP using Terraform, and configuration management via Ansible,

cutting setup time from hours to minutes. Deployed serverless workloads (Cloud Run) and scheduled jobs (Cloud Scheduler), improving cost-

efficiency and scalability.

Technologies involved: Jenkins, GitHub Actions, Terraform, Ansible, SonarQube, Nexus, GCP (Cloud Run, Cloud Scheduler, Compute Engine), Docker, Shell scripting.

Zemoso Technologies (Remote) Hyd - United States, Texas

DevOps Engineer

[04/2024 - 09/2024]

Designed and automated production-grade cloud infrastructure on GCP for a high-traffic SaaS platform using Terraform, enabling repeatable, version controlled provisioning across development, staging, and production environments. Infrastructure supported horizontal scaling, multi-region high availability (us-central1, europe-west1), and compliance with SOC2 security standards.

The automation reduced manual configuration errors by ~30% and improved system uptime to 99.8%. Integrated monitoring via Stackdriver and configured alerts on critical KPIs. Deployed containerized applications on GKE using Helm and managed 8+ Kubernetes clusters across environments. Optimized CI/CD pipelines using Jenkins and Cloud Build, and enforced strict

IAM policies to ensure secure access and auditability.

Technologies involved: GCP, Terraform, Jenkins, Cloud Build, GitHub Actions, Google Kubernetes Engine (GKE), Docker, IAM, Kubernetes, Helm, Bash, Python.

Electrolux Italia - Italy, Porcia

Business or sector Manufacturing | **Department:** Research and Development | **Email:** nithin.thadem@electrolux.com | **Website:** https://www.electrolux.it

System Validation and Connectivity Engineer

[05/06/2023 - 05/03/2024]

Validated firmware and software updates for smart home appliances, ensuring functional integrity, reliability, and seamless cloud-to-app communication. Conducted end-to-end testing of IoT features, including device onboarding, push notifications, OTA updates, and maintenance alerts. Automated test cases using Python scripts and tracked defects via Jira, improving validation cycle time by 20%. Ensured robustness of connectivity protocols (MQTT, HTTP) under

real-world network conditions.

Technologies involved: Embedded systems, IoT connectivity protocols, test automation, bug tracking (JIRA), cloud-APP synchronization.

ST Microelectronics - Italy, Catania

Firmware development engineer - Motor Control

[07/2022 - 01/2023]

Developed and tested embedded firmware for motor control applications in electric drives using C and STM32 microcontrollers. Implemented field-oriented control (FOC) algorithms and real-time fault detection in IAR Embedded Workbench. Validated performance under fault conditions (e.g.,phase loss) and contributed to a six-phase motor drive research project.

Technologies involved: STM32, IAR Embedded Workbench, C, Embedded Systems, Motor Control, Real-Time Operating Systems (RTOS).

EDUCATION & 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

LANGUAGE SKILLS

Mother tongue(s): Telugu

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

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

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