

ALAN THOMAS

<https://www.linkedin.com/in/alan-thomas-736b44270> | alanthoma98@gmail.com | (+371) 25126667

WORK EXPERIENCE

Polus Solutions

Trivandrum, India

DevOps Engineer

May 2021 - Aug 2023

Led DevOps transformation, reducing deployment time by 80% through automation and CI/CD pipelines.

Deployed and managed Dockerized applications on Kubernetes (EKS/AKS), ensuring 99.9% uptime and scalable architecture.

Designed and implemented cloud-based solutions using AWS (EKS, EC2, S3) and Azure Kubernetes Service (AKS) for high availability and resilience.

Automated configuration management by engineering Ansible playbooks, streamlining system maintenance and reducing manual errors.

Hardened system security by deploying Fortinet firewalls and configuring Linux/Windows security policies, mitigating cyber threats by 50%.

Implemented ELK Stack and Nagios, enabling real-time log analysis and reducing incident response time by 50%.

Collaborated with development teams to integrate Node.js, WebSocket, Nginx, optimizing application performance and scalability.

Managed high-performance databases (MySQL, Oracle), optimizing queries for 50% faster execution and ensuring data integrity.

Integrated Active Directory and Single Sign-On (SSO) using Shibboleth, improving authentication security and user experience.

EDUCATION

Riga Technical University

Riga, Latvia

Masters in Telecommunication Technologies and Networks Management

Graduation Date: Jan 2026

APJ Abdul Kalam Technological University

Trivandrum, India

Bachelors of Technology in Electronics and Communication

Graduation Date: Aug 2020

PROJECT EXPERIENCE

Personal Project

Infrastructure as Code (IaC) with Terraform and Continuous Deployment using ArgoCD

Feb 2025 – Feb 2025

- Implemented a GitOps workflow with ArgoCD to automate the deployment of infrastructure and applications using Terraform on a Kubernetes-based cloud environment.
- Set up a Kubernetes cluster on AWS EKS using Terraform, managing cloud infrastructure resources such as VPC, subnets, and security groups.
- Configured ArgoCD for continuous delivery, enabling automated deployment of applications from a Git repository with real-time monitoring.
- Utilized Helm for efficient application packaging and deployment on Kubernetes.
- Automated infrastructure provisioning and management via Terraform to ensure scalability and repeatability.
- Integrated CI/CD pipelines with GitLab CI and ArgoCD, automating rollbacks and self-healing to maintain application uptime.
- Set up Prometheus and Grafana for monitoring infrastructure health and creating dashboards for real-time performance analysis.

Serverless Web Application on AWS

Aug 2024 - Aug 2024

- Designed and developed a basic web application (To-Do app) where the backend is completely serverless, using AWS Lambda functions to handle business logic and API Gateway to expose the backend via HTTP endpoints.
- Stored application data in AWS DynamoDB, using it as the database for user data and tasks.
- Hosted static assets (HTML, CSS, JavaScript) on AWS S3, enabling fast and secure delivery.
- Used AWS CloudFormation to define the entire infrastructure as code (IaC), enabling easy replication of the setup.
- Set up CloudWatch monitoring to track Lambda execution and logs, enabling proactive troubleshooting and performance analysis.

- Designed a microservices-based architecture for an application (a simple e-commerce app with separate services for user authentication, product catalog, and order management).
- Containerized the application using Docker to enable easy deployment.
- Set up Kubernetes clusters (on AWS EKS) to orchestrate the containerized application, ensuring scalability and high availability.
- Automated the CI/CD pipeline using Jenkins or GitLab CI to automatically build, test, and deploy the application to Kubernetes whenever there is a code change in the Git repository.
- Used Terraform to manage cloud infrastructure (setting up EC2 instances, S3 buckets) and Ansible to automate server configurations.
- Monitored the application using ELK Stack (Elasticsearch, Logstash, Kibana) and configured alerting with tools like Prometheus and Grafana.

LEADERSHIP EXPERIENCE

International Student Council, Riga Technical University

Riga, Latvia

Volunteer

Sep 2024 - Present

- Actively participate in organizing events and activities to support the international student community at RTU.
- Collaborated with fellow council members to plan cultural exchange programs, networking events, and academic workshops for students from diverse backgrounds.
- Facilitated communication between international students and university administration, ensuring their needs and concerns were addressed.
- Contributed to creating an inclusive environment, helping students integrate into the RTU community and adapt to life in Latvia.

APJ Abdul Kalam Technological University

Trivandrum, India

Department Student Coordinator

Aug 2016 – Aug 2020

- Facilitated effective communication between students and faculty, ensuring a smooth learning environment.
- Organized academic and co-curricular activities, promoting student engagement.

SKILLS & INTERESTS

Skills: DevOps, Docker, Kubernetes, AWS (EKS, EC2, S3), Azure (AKS), Ansible, Firewalls (Linux, Windows, Fortinet, Sophos, Checkpoint), ELK Stack, Nagios, Nginx, Node.js, MySQL, Oracle, PostgreSQL, Active Directory, Single Sign-On (SSO), Jenkins, Terraform, Shibboleth Service Provider (SP), Pulse Secure VPN, VMware Horizon, CloudFormation, GitLab CI, Helm, Prometheus, Grafana, CloudWatch, IAM, Fortify, SonarQube, HashiCorp, ingress, SBOM, WhiteSource, OWASP, Podman

Interests: Travelling, Community Engagement, Video Blogging, Updating with New Technologies