

Hemant Sharma

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SUMMARY

DevOps and Cloud Infrastructure Engineer with 2+ years of combined experience in software development, technical support, IT operations, and cloud technologies. Hands-on experience with AWS, Terraform, Docker, Kubernetes, GitHub Actions, Linux, Prometheus, Grafana, and CI/CD automation through professional work and technical projects. Skilled in infrastructure provisioning, deployment automation, cloud monitoring, troubleshooting, IAM access control, and secure cloud configuration. Proven ability to analyze technical issues, improve system reliability, and build scalable, secure, and automated infrastructure solutions.

EDUCATION

Texas A&M University – Kingsville, Kingsville, TX, US	August 2024 - May 2026
Master of Engineering in Computer Science	GPA: 3.90
Coursework: Advanced Analysis of Algorithms, Cloud Computing, Database Management Systems, Advanced Cybersecurity, Artificial Intelligence, Machine Learning, Operating Systems, Computer Communication Networks.	
Gujarat Technological University, IN	August 2018 - May 2022
Bachelor of Engineering in Information Technology	GPA: 3.57
Coursework: OOP, Data Structures, Algorithms, Project Management, Software Engineering, Agile Methods.	

TECHNICAL SKILLS

Cloud Platforms: AWS (EC2, S3, VPC, IAM, CloudWatch, CloudTrail)
Infrastructure as Code: Terraform, Terraform Plan Analysis, Infrastructure Provisioning
DevOps & CI/CD: Git, GitHub, GitHub Actions, CI/CD Pipelines, Pull Request Automation, Deployment Validation, Canary Deployments, Automated Rollbacks
Containers & Orchestration: Docker, Kubernetes, Argo Rollouts, Kubernetes Manifests, Container Health Checks, Rolling Deployments
Monitoring & Observability: Prometheus, Grafana, OpenTelemetry, Metrics, Logging, Distributed Tracing, Alerting
Programming & Automation: Python, Bash/Shell Scripting, YAML, JSON, REST API Integration
Operating Systems & Networking: Linux, TCP/IP, DNS, HTTP/HTTPS, Network Troubleshooting
Cloud Security: IAM Least-Privilege Access, GitHub OIDC, Short-Lived AWS Credentials, Security Groups, Secrets Management, Encryption Validation
Troubleshooting & Reliability: Incident Investigation, Root Cause Analysis, Log Analysis, Container Troubleshooting, Service Recovery, Performance Monitoring
Security Tools: Splunk, Wireshark, Nmap

PROFESSIONAL EXPERIENCE

Frontend Developer Ultron Technologies (IN)	May 2023 - June 2024
- Developed and maintained an e-commerce web application with secure payment integrations, personalized dashboards, and real-time product updates using HTML, CSS, JavaScript, Bootstrap, and WordPress. - Improved application performance by 40% through code refactoring, lazy loading, caching, and frontend optimization techniques. - Collaborated with UI/UX designers, backend developers, and cross-functional teams to build responsive, mobile-friendly features, increasing organic traffic by 25% and user retention by 32%. - Implemented secure coding practices, input validation, authentication controls, and application security measures to strengthen user data protection and application reliability.	
Cloud & Security Support Intern - Remote Pantech Solutions (IN)	November 2023 - January 2024
Configured and supported AWS cloud resources, including EC2, S3, VPC, IAM, and Security Groups, to maintain secure and reliable cloud environments.	

- Monitored AWS infrastructure and account activity using Amazon CloudWatch and AWS CloudTrail, helping identify operational issues and unusual events.
- Troubleshoot cloud connectivity, access permissions, network configurations, and resource-related issues while documenting findings and recommended solutions.
- Analyzed network traffic using Wireshark and Nmap and assisted in identifying security risks and cloud misconfigurations, improving troubleshooting efficiency by 22%.

Computer Science Instructor | Console Computers (IN)

June 2022 - April 2023

- Delivered classroom and hands-on lab instruction in computer fundamentals, operating systems, networking, cybersecurity, algorithms, HTML, CSS, JavaScript, and Microsoft Office applications.
- Designed practical exercises, assignments, and step-by-step technical materials to help students develop foundational programming, web development, and problem-solving skills.
- Maintained classroom computer systems and provided technical support for hardware, software, user access, internet connectivity, and application-related issues to support uninterrupted lab operations.
- Simplified complex technical concepts through demonstrations and real-world examples while tracking student progress and providing individualized guidance to improve learning outcomes.

Full-Stack Developer Intern | TechnoGuide Infosoft Pvt. Ltd. (IN)

January 2022 - April 2022

- Developed and deployed the Finestra Cafe & Bistro web application using Python and Django, integrating responsive interfaces, online ordering, secure payment functionality, and customer-facing features that increased online orders by 40%.
- Built an inventory and order management system using Django to support real-time stock tracking, order processing, and administrative workflows, reducing inventory discrepancies by 30%.
- Configured the Django Admin interface to manage customer information, order history, inventory records, reviews, and application content through a centralized administrative dashboard.
- Integrated Google Maps API, customer ratings, and review functionality while troubleshooting application, database, and deployment-related issues to improve reliability and user engagement.

Frontend & WordPress Developer Intern | TechnoGuide Infosoft Pvt. Ltd. (IN)

May 2021 - June 2021

- Developed and maintained responsive WordPress websites using HTML5, CSS, Gutenberg, Elementor, themes, and plugins to improve usability, navigation, and mobile compatibility.
- Improved website performance through image optimization, caching, plugin configuration, and frontend improvements, reducing page-load time by 30% and increasing site traffic by 20%.
- Designed and delivered an Organ Donation website featuring user registration, content publishing, discussion forums, and awareness-focused information architecture.
- Supported website hosting, regular backups, security configurations, plugin updates, and troubleshooting activities to improve application availability, scalability, and protection of user data.

PROJECTS

AI-Powered Terraform Change Guardian | AWS, Terraform, Python, GitHub Actions, AI API

- Developed an automated infrastructure risk-analysis tool that processes Terraform plan output in JSON format and identifies destructive changes, publicly exposed resources, overly permissive IAM policies, missing encryption, and untagged AWS resources.
- Built a Python-based risk-scoring engine that assigns severity levels to infrastructure changes and generates evidence-based explanations, potential business impact, and recommended remediation steps using an AI API.
- Integrated the solution with GitHub Actions to analyze Terraform changes during pull requests, publish risk reports, and require manual approval before deploying high-risk infrastructure changes.
- Implemented secure AWS authentication using GitHub OIDC and short-lived credentials, eliminating the need to store long-term AWS access keys in repository secrets.
- Tested the platform with intentionally insecure Terraform configurations and documented detected risks, blocked deployments, remediation steps, and infrastructure cleanup procedures.

AI-Assisted Incident Investigation and Recovery Platform | Linux, Docker, Python, OpenTelemetry, Prometheus, Grafana

- Built an incident investigation platform that collects application logs, Linux system events, container status, deployment history, and performance metrics to support faster troubleshooting.
- Developed a Python service that correlates errors, container restarts, HTTP failures, and recent deployment changes to identify probable root causes and generate structured incident summaries.
- Integrated AI-assisted analysis to produce evidence-based troubleshooting recommendations, recovery steps, confidence scores, and post-incident reports without automatically executing production changes.
- Created Prometheus alerts and Grafana dashboards to monitor application availability, response time, error rate, CPU usage, memory utilization, and container restart activity.
- Implemented a human-approval workflow for service restarts and deployment rollbacks, followed by automated health checks to verify successful recovery.

Intelligent Canary Deployment and Automated Rollback System | Kubernetes, Docker, GitHub Actions, Prometheus, Argo Rollouts

- Designed a Kubernetes-based canary deployment workflow that gradually routes traffic to new application versions while monitoring availability, HTTP error rates, latency, and container health.
- Configured Argo Rollouts and Prometheus analysis templates to automatically pause or roll back deployments when application performance exceeded defined failure thresholds.
- Developed a GitHub Actions pipeline to test application code, build and publish Docker images, update Kubernetes manifests, and initiate controlled canary releases.
- Added automated post-deployment validation and AI-generated explanations describing why a rollout succeeded, paused, or rolled back based on observed metrics.
- Tested successful and failed deployment scenarios and documented traffic progression, rollback behavior, health-check results, and troubleshooting procedures.

CERTIFICATIONS & TRAINING

- Red Hat Certified System Administrator (RHCSA) (2016)
- Google Cybersecurity Professional Certificate
- AWS Cloud Practitioner Essentials
- TryHackMe Pre Security
- TryHackMe AI Security
- Star Cyber Secure User (SCSU)