# PRIYANSHU KUMAR

### **EDUCATION**

**CDAC** 

PG-DITISS (IT Infrastructure, Systems, and Security) - Percentage - 72%

FEB 2025 - AUG 2025

Pune

### COURSEWORK / SKILLS

- Fundamentals of Computer Networks
- Concept of Operating Systems & Administration
- Programming Concepts
- IT Infrastructure & Management and DevOps
- Security Concepts
- Network Defense & Countermeasures
- Public Key Infrastructure
- Cyber Forensics & Compliance Audit

### **PROJECTS**

### RedOpsAI vs BlueShield – AI-Driven Cybersecurity Simulation Framework ♂

2025

Python, Snort IDS, ELK Stack, pfSense, Zero Trust Architecture, VMware/Kali, Custom AI Models

- Designed and implemented a dynamic, AI-powered Red Team vs Blue Team cybersecurity framework simulating real-world attack-defense scenarios.
- Developed **RedOpsAI**, an AI-based offensive engine capable of automated attack simulations, exploit chaining, and vulnerability reconnaissance.
- Built **BlueShield**, a Zero Trust defense framework with Snort-based real-time intrusion detection, pfSense firewall policies, and centralized logging via the ELK Stack.
- Enabled automated Red Team/Blue Team exercises with repeatable attack vectors and defensive responses.
- Enhanced alert accuracy and threat visibility using AI-model feedback loops and SIEM integrations.

## Full-Stack Kubernetes App with KEDA, RabbitMQ, Velero & GitHub Actions CI/CD 2 2025

Vue.js, FastAPI, RabbitMQ, KEDA, Kubernetes, Velero, GitHub Actions, Docker, Prometheus, Grafana

- Designed and deployed a full-stack app on Kubernetes with KEDA-based event-driven autoscaling.
- Built containerized Vue.js frontend and FastAPI backend with RabbitMQ for async messaging.
- Configured Velero for automated cluster resource and volume backups.
- Developed a CI/CD pipeline via GitHub Actions for automated build, test, and deploy.
- Integrated Prometheus + Grafana for observability; secured with Kubernetes Secrets, RBAC, and image scanning.
- Deployed on Minikube and GKE/EKS/AKS-ready clusters cloud-native and scalable.

### TECHNICAL SKILLS

Languages: Python, SQL, Bash

Dev Tools: VS Code, Git, Docker, Jenkins, Ansible, Terraform, Postman

Technologies: Linux (Kali, Ubuntu), Windows Server, Kubernetes, Apache, NGINX, pfSense

DevOps: AWS, GitHub Actions, Docker Swarm, CI/CD, MinIO, RabbitMQ

Security: Snort, Suricata, Burp Suite, Wireshark, ELK Stack, VPNs, SIEM, Metasploit

Networking: TCP/IP, Subnetting, OSPF, VLANs, NAT, DNS, DHCP, Firewalls (iptables)

Certifications: Cloud Computing - NPTEL, Data Mining - NPTEL

#### **EXTRACURRICULAR**

- College Football Team Captain Led the official college team; coordinated training sessions and represented the institute in university-level tournaments.
- Sports Event Organizer Managed planning, logistics, and execution of multiple inter-college sports events.