VISHAL RAJ

Pune, Maharashtra, India | +917769932142 | vishalraj0.work@gmail.com | LinkedIn | Github

SKILLS

Cloud and DevOps: AWS, GCP, Microsoft Azure, Hybrid Cloud, Terraform, Kubernetes, Docker, CI/CD, Git, Jenkins, Ansible, CNAPP (WIZ, Datadog).

Visualization tools & libraries: MatPlotLib, Seaborn, Grafana.

Programming & Scripting: Python, Golang, Bash, Powershell.

Libraries & Frameworks: Pandas, Numpy, TensorFlow, scikit-learn.

WORK EXPERIENCE

Demandbase Sep 2024 – Mar 2025

Product Security Intern

- Led shift-left initiative by developing secure **Terraform** IaC modules (**Lambda-API Gateway, S3, VPC, RDS, EC2, WAF**) with complex integrations per **AWS CIS** benchmarks, ensuring guaranteed secure deployments.
- Spearheaded development and deployment of AWS WAF.
- Collaborated on team-wide automations and assisted peers with GitLab CICD, Slack bot integrations, and phishing simulations.
- Monitored **container** images/VMs via **WIZ** and triggered Slack alerts for neglected/outdated resources—exceeding compliance targets by reducing neglected container images by 30% (goal: 10%) and VMs by 8.4%.
- Automated daily standup calls, reducing meetings from 3 to 1 per week, boosting team focus and productivity.
- Developed an automation to identify the container's **GitLab** repositories, **Dockerfiles** and **pipelines** for compliance regarding critical exposure issues, reducing the count by 80%.

Btech Walleh Feb 2024 – Apr 2024

SWE - Artificial Intelligence Intern

- Assisted in developing ML-based applications and NLP-driven models as part of research and prototyping.
- Built an LSTM-based sentiment analysis bot using **TensorFlow-Keras** on IMDb dataset (50k+ rows); achieved **85.51%** accuracy.
- Worked on creating complex yet simple machine learning models by using methods like model **stacking** and **boosting**, increasing accuracy by ~20% than prior models.

Dabotics India Feb 2024 – Mar 2024

SDE – Intern

- Crafted an OTP verification app in Python with **Tkinter** and **SMTPlib**, ensuring ~99% authentication security and reducing verification time by 40%.
- Developed a chatbot utilizing NLP and machine learning algorithms, achieving approximately 70% response accuracy.

PROJECTS

Phishing Simulation Campaign (Demandbase)

- Replicated Demandbase's IAM frontend using HTML, CSS, JS and configured a Python Flask backend, deployed it to AWS serverlessly with Flask-Zappa.
- **S3** bucket: storing static files, **Lambda**: dynamic request handling, **API Gateway**: to trigger lambda, all resources deployed inside a **VPC**. VPC deployed via a **Terraform** module.
- Integrated the API endpoint with a QR code and shared company-wide. User information (no. of clicks, IP address details, text typed, etc.) were captured for a knowledge-sharing session

EKS GCP Secure Connectivity (*Demandbase*)

- Created an **AWS EKS** cluster and 1 node group with **EC2** instance using console.
- Developed a **Dockerfile** which runs main.py (fetches object from GCS), deployed it in AWS ECR. EKS has a **Kubernetes** Service Account linked to an IAM role (OIDC), IAM role is recognized by GCP via Workload Identity Federation, this Federated IAM Role is allowed to Impersonate GCP SA. Pod created using **Kubectl**.
- Established a secure connection relying on Service Account credential, security enhanced by **50–80%** through minimized credential misuse and automatic token expiration.

EDUCATIONAL QUALIFICATIONS

• Pursuing Bachelor's in Computer Science and Engineering from Chandigarh University (7.86 CGPA).