# **Yash Shanker Srivastava**

### Cloud | DevSecOps | Distributed Systems | Observability | Automation

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### **Experience**

APRIL 2020 - PRESENT

<u>Setu</u>, Bangalore - Engineering Lead - DevOps

#### Architecture

- Architected the entire AWS Architecture around Elastic Container Service.
  - Improved scalability, reliability, and observability.
  - Reduced change release time from over 1 hour to a few minutes.
  - Designed and implemented Canary deployments,
    - This enabled multiple production deployments a day using Terraform and GitlabCl.
- o Architect and implement Platform solutions for Development teams.
- Review and give feedback to architectures developed by Development teams.
- Currently working on Kubernetization of the DevOps Platform and Platform Services.

#### • Infrastructure, Security, and Compliance

- Platformised DevSecOps for the AWS Infrastructure using Hashicorp Terraform and Packer.
- Reusable, self-serve, and pluggable production-grade Infrastructure as Software reduced developers' overhead to write and manage infrastructure.
- Built-in AWS Well-Architected features and out of the box Certified RBI SAR and ISO 27001:2013, with hardened AMIs with HIDS(Ossec), NIDS(Snort+PulledPork), AntiVirus(ClamAV), HostMonitoring(PrometheusNodeExporter, MetricBeat), Container Monitoring(cAdvisor), with logs coming into Elasticsearch using Filebeat.
- Continuous Compliance using AWS SecurityHub + Config + GuardDuty + Inspector + Macie, sending findings as Pagerduty Incidents as well as Slack notifications, and automated weekly audit reports from ScoutSuite and Prowler.
- SAST using Sonarqube and IaaC compliance using git commit hooks for checkov and tfsec.
- Site-Site-VPN connection to connect with NPCI's and Banks' infrastructure over private IKE channels, built into the platform.
- o Decentralized ownership of infrastructure to the Development teams, and DevOps owned Platform.
- The Platform eased the scaling of Setu's infrastructure from 1 live product and a few thousand requests to 7 live products, processing millions of requests and tens of TBs of data a month.

#### Observability

- Designed the Observability Stack using node-exporter, cAdvisor, filebeat, metricbeat, elastic-logging-plugin-for-docker Cloudwatch, Elasticsearch, Prometheus, Kibana, Grafana, with alerting and incident management on Pagerduty services with appropriate escalation policies.
- Setup Application, Container, Database, Host, Network, and Cloud Account Monitoring.
- Designed Incident Management framework and on-call policies.

#### Operations

- Led over 30 3rd Party infrastructure and application security Audits and VAPTs done on Setu's Infrastructure, including ones directly done by the Reserve Bank of India and REBIT.
- Regularly monitored and optimized AWS costs.
- Communicating with Vendors like PagerDuty, AWS, Sentry, etc to optimize best deals for their services.

#### Management

- Communicate with other Engineering Team Leads for their Platform and DevOps requirements and perform prioritization.
- Communicate with Banks' Network and Security Teams and propose secure and compliant solutions for services' communications.
- Hiring and Building the DevOps Team.

#### Evangelism

- Took a series of Learning sessions for the Engineering Team.
- o Mentored junior SDEs on Networks, Infrastructure, Systems, etc.

OCTOBER 2018 - APRIL 2020

<u>Perennial Systems</u>, Pune - Senior Associate Architect - DevOps

- Setup DevOps practices from scratch, established and led the DevOps and Site Reliability Engineering division at Perennial Systems.
- Setup CICD pipelines in Bitbucket Pipelines, Monitoring using ELK+Beats+APM.
- Involved in various pre-sales activities and designing compliant, fault-tolerant, HA cloud architectures for Cloud-based solutions mostly hosted and managed on AWS.
- Worked as DevOps Engineer for Validus Capital, Singapore, and 2c2p Payments, Bangkok for over a year.

FEBRUARY 2017 - SEPTEMBER 2018

The LeanApps Software Pvt Ltd, Pune - Software Associate - DevOps

- Designed AWS Infrastructure, Observability, Build and Release automation for production systems.
- Setup CI/CD Pipelines based on Jenkins for SpringBoot applications, ReactJS Apps, and automated releases of ReactNative applications on PlayStore and AppStore using Fastlane.
- Explored new technologies and implemented them in the applications after a thorough POC.

MAY 2016 - AUGUST 2016

PayU Payments India Pvt Ltd, Gurgaon - Software Development Intern

- Developed a self-serve Payment Page customization platform for merchants on PayUBiz.
- Worked on integration and customization of various modules for Enterprise merchants.

#### Education

JULY 2013 - JUNE 2017

University of Petroleum and Energy Studies, Dehradun - B. Tech Computer Science Engineering

- Led UPES ACM Student Chapter to the Best Chapter (International) Award.
- Participated and organized various technical events in various Tech Fests.

# **Public Speaking**

SEPTEMBER 2017

**HashiTalks India 2021, Hashicorp** - *Platformising DevOps with the HashiCorp Stack* 

- YouTube Broadcast
- <u>Slides</u>

## **Tech Stack**

Туре	Tech
Programming Languages	Python, Bash
Cloud	AWS, GCP, Digitalocean, Linode
Databases	Postgresql, Aurora, MySQL, DynamoDB, Elasticsearch, Redis
Messaging	RabbitMQ / Cloud-AMQP, SQS
Ops-sec	Sonarqube, OSSEC, Snort, OSQuery, WAF, ISO27001, PCI-DSS, Prowler, ScoutSuite
IaaC	Terraform, Pulumi, CloudFormation
Container Orchestration	ECS, Kubernetes(EKS, GKE, SelfHosted), Helm
Observability	Prometheus, Cortex, Loki, Tempo, Grafana, Datadog, ELK, Metabase, Redash, PagerDuty, Beats, cAdvisor
CI/CD	GitLab CI, GitHub Actions, Jenkins, Fastlane, Travis CI, Bitbucket Pipelines