Mitali Sahoo

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PROFESSIONAL EXPERIENCE

Senior Software Engineer   *March 2020 – December 2021*
Samsung R&D Institute   *Bangalore, India*
- Proposed and led development of a cost prediction web app based on Google Cloud that helped with cost reduction recommendation and enabled cloud cost governance. This led to 30% savings in the resource expenses for the R&D division.
- Designed and implemented robust scalable Kubernetes based microservice architecture over multi-cloud Infrastructure for Bixby voice-controlled assistant components leveraging terraform and helm charts.
- Led enhancement of CI/CD strategy for early fault detection prior services rollout and moved to Canary deployments to Spinnaker while improving the service availability by 20% margin.
- Developed an interactive chatops tool to centralize application deployment for external teams with role based controlled access.
- Experience in deploying Istio service mesh for communication between microservices in distributed architecture.
- Designed observability setup for kubernetes based microservice components leveraging Fluentd, sumologic, datadog, grafana and prometheus to run metricing, logging and tracing for application data dynamically.
- Worked on securing EKS and GKE clusters using RBAC, security groups, IAM policies, and service accounts.
- Experience with deploying and managing lambda based serverless application triggered based on events on s3 and integrated with SNS for completion/issue notifications

Software Engineer   *July 2018 – January 2020*
Capgemini India   *Bengaluru, India*
- Developed IaaC landing zone leveraging Terraform to quickly lay down baseline infrastructure, leading to save 8 hrs per customer thereafter.
- Led effort on improving the security posture of systems and cloud accounts leveraging Hashicorp Vault for secret management and integrated the same into automation with chatops bot framework.
- Automated provision and management of backend infrastructure with multiple open-source tools for 70+ customers.
- Implemented Dockerized IOT microservice and orchestrated the platform with Docker Swarm to transition from standalone to containerized infrastructure for a cruise line project.
- Experience in provisioning AWS Services like EC2, S3, Glacier, ELB, IAM, RDS, Route53, VPC, Auto Scaling, CloudFront, Cloud Watch, Cloud Trail, Cloud Formation, Security Groups.
- Experience working with multi-platform cloud infrastructure and building robust fault tolerant infrastructure backend solutions.

Systems Engineer   *June 2016 - April 2018*
Tata Consultancy Services   *Bengaluru, India*
- Migrated 35+ applications based on virtual platforms into AWS Cloud infrastructure and managed build, migration, and cost optimization.
- Managed virtual and physical infrastructure, specific to backups with Veeam, storages, networking and monitoring stack for VMware vSphere.

EDUCATION

Santa Clara University   *Santa Clara, California*
Masters in Science, Computer Science   **Jan 2022 - Mar 2023**
Courses: Distributed Databases, Big data, Web Search/Information Retrieval, Advances Algorithms,Machine Learning

GITAM University, India (Bachelors in Technology, Information Technology)   *Apr 2012 - Apr 2016*
Courses: Algorithms, Object Oriented Design, Artificial Intelligence, Operating Systems, Networks.

PROJECTS

- **Recommender systems implementation** on Netflix sample dataset using User based and Item based collaborative filtering to improve Netflix's recommendation algorithm. *[github]*
- **Page-Rank Analysis** of Berkeley Stanford graph dataset with Naive & Power Iteration algorithm - *Apache Spark, HDFS [github]*
- Proposed a **Sensory based respiratory self-healthcare checkup device** model on raspberry-pi and visualization on Grafana enabled with remote visual readings fed on cloud for health monitoring covid-19 (presented at Samsung BPA 20) *[github]*

LANGUAGES AND TECHNOLOGIES & CERTIFICATIONS

- **Languages:** Python, C++, Java, Bash, Javascript, JQuery, HTML5, CSS
- **Infrastructure:** Amazon Web Services (EKS, lambda, API Gateway, s3, SNS, SQS, SES, VPC), Google Cloud, Kubernetes, docker Swarm
- **Databases:** MySQL, DynamoDB, Oracle, InfluxDB, Redis cache
- **Technologies:** Node.js, Django, Hadoop, Apache Spark, Terraform, Jenkins, Spinnaker, Docker, Git
- **Observability:** Fluentd, Datadog, Sumologic, GCP stackdriver, Grafana, Prometheus, ELK
- **CERTIFICATION:** AWS Solution Architect Professional Certified [*Validation Number: **KLP00VC13FRQQS33***]