

Mayank Kumar

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PROFESSIONAL SUMMARY

- 12+ years experience in design, development and maintainence of services and application in B2B, B2C domain.
- 6+ years experience in leading a team of 4-9 members; mentoring junior members and participating in code reviews.
- As part of the platform team, I write software that delivers network management software from our Kubernetes-based backend to the customer's network.
- Experience in interacting with customers to identify and resolve production issues.
- **CKAD**: Certified Kubernetes Application Developer.
- Contributing to **Dapr** and k3s klipper open source software.

SKILLS

Programming: Go, gRPC, Protobuf Objects, Python, SQL, Shell scripting, Rego
Other Areas: Docker, Kubernetes, Kafka, IAM, RESTful APIs, Virtualization and Cloud, Git, Microservices, SPIFFE/Spire

WORK EXPERIENCE

Infoblox, Bengaluru (Jul 2017 – Jun 2024)

Senior Staff Software Engineer

Identity Access Management (IAM)

- Designed, developed and maintain the Identity service for all http and gRPC requests authentication.
- Continuously worked on improving the service to handle scale requirement using cache and other optimisations.
- By using continuous monitoring and caching, brought down P95 latency under 10ms with a performance improvement of 10x.
- Technology Stack: Golang, mTLS, Tokens, OPA/Rego, Ingress Controller, SPIFFE/Spire

Secrets Manager Controller

- Implemented k8s controller to offer a standardized and automated approach to secret creation, deletion, validation, injection and retrieval.
- The controller eliminated the concept of perpetual keys and provided a straightforward rotation mechanism.
- Technology Stack: Golang, Controller Gen.

Backup and Recovery

- Extended K8s API with the aggregation layer to support backup and recovery of cloud managed objects.
- Technology Stack: Golang, Kubernetes aggregation layer.

Troubleshooting Service

- Designed and Implemented microservice for support users to troubleshoot issue with edge devices without actually logging into it.
- Technology Stack: Golang, gRPC, Kubernetes, Teleport.

Edge device activation

- Designed and Implemented microservice for onboarding edge devices to cloud platform.
- Enhanced the existing communication cabability between cloud platform and edge devices using TLS/SSL.
- Technology Stack: Golang, gRPC, Protobuf, Kubernetes, ACM PCA, Ingress and Ingress Controllers.

Health Collector and Reporter

- Designed and Implemented system for monitoring the health of applications on edge devices.
- Technology Stack: Golang, Docker, Kubernetes, Redis, gRPC, Protobuf.

Data Collector

- Enhanced the capability of the existing data pipeline solution to capture events from Infoblox NIOS product to multiple vendors SIEM solution.
- Technology Stack: Python, Syslog, ArcSight, McAfee SIEM.

Intellus Learning Inc., Bengaluru (May 2016 – Jun 2017) Senior Software Developer
Student Interaction Platform

- Implemented student experience platform to track and analyze progress of student registered across curated contents.
- Enhanced the performance of existing modules by 12x through in-memory and distributed caching.
- Implemented event tracking to analyze student involvement and retrieve meaningful insights.
- Technology Stack: Python 2.x, MySQL, Django, Nginx, uwsgi, webpy, AWS

Hewlett Packard Enterprise, Bengaluru (Sep 2012 – May 2016) Systems/Software Engineer II
HPE eon

- Worked on designing and implementing drivers to extend compute capabilities in a deployed cloud service by exposing REST APIs.
- Drivers extended KVM and ESX compute on-demand capability, using ansible.
- Technology Stack: Python, Pecan, Stevedore, Cliff, MySQL

HPE CloudSystem 9.0, 8.1 and 8.0

- Implemented event based auxiliary virtual machine manager using RESTful APIs to setup and configure complete cloud.
- Designed and developed Active/Active High availability solution using Keepalived as failover VIP provider and HAProxy load-balancer.
- Implemented messaging based event module to generate instances, network, volumes lifecycle operation events using rabbitmq messaging service.
- Worked on feature implementation and bug fixing on OpenStack. Primarily on Nova and Glance image service.
- Technology Stack: Python, Shell Scripts, OpenStack, HAproxy, Keepalived, High Availability, Rabbitmq clustering, MySQL Clustering

EDUCATION	Birla Institute of Technology, Mesra, Ranchi	
	B.E. in Computer Science & Engineering, 7.63 CGPA	2008 – 2012
	DAV Public School, Dhanbad, Jharkhand	
	AISSCE, 91.6%	2005 – 2007
	Indian School of Learning, Dhanbad, Jharkhand	
	AISSE, 84.6%	2004 – 2005