

EDUCATION

IIT Roorkee

B.Tech in Electronics and Communication Engineering
2016 - 2020

SKILLS

Technologies

- Go • Python • Rust • C/C++ • Javascript
- PHP • Kubernetes • Terraform

ACTIVITIES

Open Source

- Cilium - Core Contributor
- CloudCV - Contributor
- Google Summer of Code - 2018
- Google Code In mentor - 2018
- Committer - Tor, OWASP, Firecracker

Competitions

- CSAW India Finals - Runner Up
- BSides Delhi CTF - 2nd Runner up
- BrainWaves CTF - 2nd runner up

Hackathons

- Microsoft Code.fun.do
- Inter IIT Hackathon
- Hack InOut

PROJECTS

Xene

- Xene is a distributed workflow runner.
- Inspired by open source projects including Terraform and Kubernetes.

Beast

- Jeopardy-style CTF challenge deployment and management tool.
- Includes an in house feature-rich UI to host competitions.

Muzi

- Worked on rewriting complete UI using react-redux framework.
- Developed libraries and scrappers to interact with online services like spotify, saavn etc.

Pinger

- An uptime and status monitoring application with pluggable probes and storage backends.

EXPERIENCE

Microsoft | Software Engineer

March 2021 - Present | Vancouver, Canada

- Lead the development of Azure's hyperscale virtual networking dataplane to support million ip configuration scale in a single vnet.
- Working on Bring Your Own Datapath platform for SDN routing/policy offload to network-optimized appliances in collaboration with AMD/Nvidia/Fungible.
- Added IPv6 support to Azure's next-generation networking control plane.
- Delivered various first-party customer features like JIT to IaaS, Storage firewall management, Global cert migration etc.

Isovalent | Software Engineering Intern

August 2020 - March 2021

- Built gitops based infrastructure pipeline on top of terraform with chaos testing support for customer topology.
- Worked on open-source Cilium to improve k8s operator and built features for Dual-Stack Kubernetes environment.

Dgraph Labs | Intern

December 2019 - January 2020 | Bangalore, India

- Lead the development of Kubernetes operator for Dgraph and improved the existing Kubernetes deployment manifest and helm chart.
- Created terraform module for Dgraph one-click deployment on various public clouds and built marketplace product for AWS and GCP.

Cilium | Core Contributor

July 2019 - Present | Open-Source

- Lead the development of ClusterWide network policies for Cilium.
- Worked with the team to triage and fix various control and data plane issues.

Microsoft | Software Developer Intern

May 2019 - July 2019 | Hyderabad, India

- Worked on creating a pipeline for deidentification of DICOM images for Azure Health.
- Created a Library for DICOM image deidentification integrating with Microsoft Vision API and classification Engine.

HackerEarth | Infrastructure Intern

December 2018 | Bangalore, India

- Lead the development of PoC for migrating the entire infrastructure to Kubernetes, integrating developer workflow pipeline with tools like Istio, Spinnaker etc. with multi cloud support.
- Worked on migrating existing services to terraform provisioned infrastructure.

Google Summer of Code | Software Developer

Summer - 2018 | Remote(Link)

- Engineered a service daemon utility to manage the demo creation pipeline and deploy applications in containerized environment on the servers.
- Worked on implementing CI/CD pipeline for automated testing and deployment.

University | IIT Roorkee

July 2016 - June 2020

- SDS Labs: Spearheaded the development of University and Open-Source projects.
- InfosecILTR: Participated in various online and onsite CTF competitions.