S Raghav Pillai

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Objective

To use my knowledge to solve challenging problems and develop technology that has a positive effect on the world

Education

Qualification	Institution	Year	Score
Bachelor of Technology *Computer Science and Engineering*	SRM Institute of Science And Technology, Chennai	2016–2020	CGPA: 8.13
Class XII *Central Board of Secondary Education*	St. Mary's Senior Secondary School, Delhi	2016	87.6%

Achievements

- **Common Vulnerabilities and Exposures**
  CVE ID 2019-13143, 1st July 2019
  View at: cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2019-13143

Experience

- **Moveworks India (Bangalore)**
  Senior Software Engineer 1, *September 2024 – Present*,
  Implemented RBAC on opensearch based on fields of an index, enabling stakeholders to view documents that they are authorised to.

  Senior DevOps Engineer 1, *March 2023 – September 2024*,
  Setup an automatic infra health check system in place to automatically detect what infrastructure a service connects to (Postgresql, redis, kafka etc) and run sanity tests with the config passed to the service.
  Set Up an ArgoWorkflow framework which enabled devs to write, test and deploy workflows in python without any devops intervention. This framework also minimised human errors and enforced conventions. This reduced DevOps overhead and was widely adopted to run multi env workflows.
  Setup Bazel in the k8s-manifests repository which enabled me to set up pre merge checks such as pre merge diffs. This reduced outages due to manual errors considerably.

  DevOps Engineer 1, *April 2022 – March 2023*,
  Responsible for managing cloud infrastructure, building CI-CD pipelines and tooling.
  Migrated services from a monolithic deploy pipeline to service-specific deploy pipelines, effectively bringing a service's deployment time from well over 2 hours to less than 10 mins.
  Implemented automated "deep" health checks for all microservices.
  Set up infra in the EU region to meet GDPR guidelines.

- **Citrix R&D India (Bangalore)**
  Platform Engineer 2, *Nov 2021 – April 2022*
  Responsible for building and maintaining Internal services on Azure.

- **Zolostays (Bangalore)**
  Platform Engineer 2, *July 2020 – Oct 2021,*
  Managed infrastructure, VPN, Users access, and Microservices,
  Started zolo's **bug bounty program,**
  Took measures to **secure** the **infrastructure,**
  Performed **cost optimisation** exercises and saved over **$2000 per month,**
  Developed internal services, pipelines and various automation to save time.
  DevOps Intern, *Jan 2020 – June 2020*
  Zolostays is an Indian startup which offers Co-living services in various cities. Here I spent my time
  building, deploying and managing the infrastructure of multiple microservices.
- **Internships**
  Security Consultant Intern, **SecureLayer7 (Pune),** *June 2019–July 2019,*
  SecureLayer7 is an IT company providing security solutions to multiple organisations. I spent my time
  here pen-testing IoT devices like smart switches, locks, etc.
  Software Developer Intern, Xobin (IIT Madras Research Park), *June 2018 – July 2018,*
  Xobin is a startup based out of IITMRP. I worked as a Software Developer for a Duration of 45 days.

Technical Skills

- Kubernetes *Advanced*, Docker *Intermediate*, Linux *Intermediate,* Jenkins *Intermediate*
- GoLang *Familiar,* Python *Advanced,*
- AWS (*EC2, EKS, S3, Lambda, WAF, GuardDuty, Config, Cloudwatch etc*)
- Terraform *Intermediate,* Bazel *Intermediate*
- ProtoBuffers *Intermediate,* GRPC *Intermediate,*
- SQL *Intermediate,* MongoDB *Familiar,*

Projects

- **ArgoWorkflow Framework**
  An abstraction layer on top of python hera framework for argo workflows that allow developers to
  write cross environment workflows without any DevOps involvement.
- **Manifest generation framework**
  A Bazel rule that takes params like resource requirements as inputs and generates the necessary k8s
  manifests to deploy a microservice in AWS EKS.
- **zOps**
  A project to create and manage Configmaps and secrets for various applications through a web
  console. Integrated with the proprietary access control system (Bifrost) of Zolostays.
- **Ragnarok (Cluster Shutdown)**
  A serverless project to turn off/scale down all staging clusters during nights and weekends which can
  also be turned on at the push of a button during the shutdown hours.
- **Encrypting Secrets using Ksops and AWS KMS**
  The base64/cleartext secrets in the git repositories were encrypted using AWS KMS.
- **PinNinja**
  github.com/securelayer7/PinNinja
  An Arduino script to identify UART pins.
- **Rubber Ducky Using an Arduino Leonardo Pro Micro**
  github.com/vologue/Rubber-ducky-using-arduino-leonardo-pro-micro
  An Arduino script that provides the attacker with a shell from the victim's machine.

Activities & Involvements

- Presenter at PyCon India 2019.