

Tasdik Rahman

tasdik95@gmail.com • www.tasdikrahman.me •  /tasdikrahman • Contact No: 9962644516

WORK EXPERIENCE

Razorpay (YC W15), Bangalore: *Infrastructure Engineer,* July, 2017 - Present

- Enabling scale @ Razorpay as part of the SRE team, handling day to day operations, managing logging/monitoring and existing infra, handling upgrades, adding newer services, rolling hotfixes for security vulns., R&D for newer infrastructure, participating in on-call rotations to maintain up time of our systems.
- Architected and implemented a layering approach for the container images being used by all the prod/stage applications by separating each layer with a specific purpose enabling separation of concerns, increasing re-usability.
- Implemented the switch from kube2iam to kiam, used for providing different AWS IAM roles for pods running on Prod/Stage/QA Kubernetes environments with zero downtime, hence effectively decreasing the total outbound network calls to AWS for IAM API calls.
- Implemented the switch from calico/flannel and kube-proxy to kube-router for pod-networking, service-proxy and enabling network policies to secure pod to pod communication in our Prod/Stage/QA Kubernetes environments, reducing the number of moving parts in cluster.
- Setting up Automation for automated RDS instance backups, deletion of unused virtualised instances and resources like old AMI's, backups in stage/prod/qa environments on AWS for cost cutting using lambda jobs.
- Migrated several of the services, earlier deployed in ASG pattern to kubernetes deployments with minimal downtime.

CISCO, Bangalore: *Software Engg. Intern, Security Business Group* Jan, 2017 - June, 2017

- Rewrote an internal service previously a monolith to a micro-services based architecture (RabbitMQ, federation, AMQP protocol, docker, distributed systems)
- Implemented a POC to integrate ELK Stack to an existing appliance framework for real time log aggregation, analysis and querying (Elasticsearch, Logstash, Kibana)

Wingify, New Delhi: *Software Engg. Intern, VWO Team* June, 2016 - August, 2016

- Integration of StatsD and Graphite for visualization of real time data consumption from RabbitMQ Work queues by an internal service on an array of production servers.
- Improved performance by **23.6%** for an internal *flask* powered REST API used for report generation by the VWO app, by refactoring existing codebase and rewriting current implementation.

OPEN SOURCE

Google Summer of Code: *oVirt Org under RedHat* Summer 2017

- Wrote two additional Ansible playbooks from scratch along with their test cases for enabling remote machine engine renames with zero downtime and for interaction of the main control engine with remote resources (Database, Data Warehouse) and other oVirt-utilities which would directly help in *Easier testing, Automated Re-deployment and Reduced manual errors while deploying.*

EDUCATION

B.Tech in Information Technology, SRM University, India 2013 - 2017

- CGPA of **9.133/10**

TECHNICAL
SKILLS

Languages - Python, Go, Shell Script
Tools/Frameworks - Ansible, Packer, Terraform, Docker, Django, Flask, Git, systemd
Databases - MySQL, PostgreSQL, Elasticsearch
Logging/Monitoring - prometheus, grafana, fluentd, splunk
OS - Unix/Linux, CoreOS
Container Orchestration - Kubernetes
CI/CD - wercker, drone, distelli
Cloud Providers - AWS, DigitalOcean, GCP, Linode

NOTEWORTHY
PROJECTS

All projects are available on Github : github.com/tasdikrahman

- **SRM Search Engine:** *SysAdmin & Backend developer*
A General Purpose Search Engine, funded by “*National Internet Exchange of India*”. Oversaw migration to *Flask* based app from a legacy CGI service. Helped write RESTful APIs for various smart modules for our search service. Wrote scripts to automate the maintenance of our server. Crawlers to extract & index millions of pages, using NLP techniques to clear irrelevant data. Helped design & set up a 15 node, master-slave architecture Hadoop cluster.
- **Plino** plino.herokuapp.com/
Conceived plino, a high accuracy spam filtering system built on top of a custom *Naive Bayes Classifier*, trained against 33,000 emails. Designed & developed RESTful APIs using Flask. Implemented Caching for server load reduction. **Achieved over 3000+ users** in our 1st version.
- **easyrbac** github.com/tasdikrahman/easyrbac/
A *pip* module, which allows you add *Role Based Access Control* to your application using which you can include fine grained rules specifying which role has access to what kind of resources. An implementation of Prof. Sandhu’s [paper](#)
- **tnote** github.com/tasdikrahman/tnote/
A cross platform, command line note taking app built using python. Ability to add/remove tags & timestamp in notes. Supports Full text search based on content and tags & highlights the match if found. Encrypted the Database using AES-256 in CBC mode. Peewee used as ORM.

ACHIEVEMENTS
& AWARDS

- Special mention among the winners for our project at the annual Engineering Hackathon at CISCO competing among 24 teams.
- **SRM Search Engine** got covered thrice in *Times Of India*, a leading newspaper & by the TV Channel, *Vasanth TV*.
- **Plino** got featured on *Product Hunt* in **tech** genre.
- **tnote** got featured by *Import Python* & *Python Weekly*.
- Got sponsored by PyCon Taiwan, 2017 to speak at the conference.
- Got sponsored by Linux Foundation to attend KubeCon North America held at Austin, 2017.

TECHNICAL
TALKS GIVEN

- “**Diving deep on how imports work in Python**”, PyCon Taiwan June 2017
- “**Introduction to Ansible**”, Bangalore Python User group April’17 Meetup
- “**Demystifying how imports work in Python**”, ChennaiPy October’16 Meetup

HACKATHONS

- Team Leader for the Intern group during the Annual Internal Engg. Team hackathon at CISCO.
- Team Leader for a group of 5 at “**Startup Weekend, Chennai**” (2015)

MORE

- LinkedIn <https://www.linkedin.com/in/tasdikrahman/>