Shivam Khandelwal

 +91-945-777-7788   skbly7@gmail.com   shivamkhandelwal.in   skbly7   skbly7   skbly7

EXPERIENCE

AIcrowd   Remote (Geneva, CH)
CTO   *Oct 2019 - Aug 2022*

Build the technical team of the MLOps startup from 0 to 10 members, including responsibilities ranging from individual contributions, handling external clients and community members.

- **Infrastructure**: Responsible for **architecting and managing** company-wide deployments and **vendor neutral** infrastructure, which was scaled to work for 0 to 60k+ users over time.
  - **CI Pipelines:** To run and evaluate ML models performance by automating using GitLab CI, Argo and Helm charts. These pipelines were triggered 200k times along with 4TB+ artifacts hosting.
  - **Kubernetes:** Managed multiple clusters deployed using kOps, and Azure managed kubernetes service.
  - **Observability:** Grafana dashboards and GitLab status pages using Grafana, Loki, and Prometheus for business usecases, infrastructure debugging and self-service portals for community members.
- **ML Starter Kits**: Developed 20+ starter kits as Jupyter notebooks and code repositories. It allow ML researchers to specify system runtime with the models, run end-to-end evaluations (CI pipelines) locally, get automatic error-handling, and utilize auto-generated code templates. It finally act as the building block to run ML models for performance evaluations and inference APIs in a scalable and reproducible manner.
- **Products**: Launched multiple products and MVPs using Flask, Rails, and JS frameworks. The usecases include visualizing ML models performance, human-in-the-loop model evaluations, and hosting ML models.

Tower Research Capital   Gurgaon, IN
Core Engineering Software Developer   *Jul 2018 – Sep 2019*

Worked with HFT firm in the cloud services team and observability component with responsibility to manage ELK infrastructure and help other teams in better visibility into their cloud workloads.

- **ELK Stack**: Deployed and managed the infrastructure to collect logs from company wide cloud devices and selected onprem devices via filebeat, logstash and syslog. Worked to automate ELK deployments and provide self service deployment using GitLab CI, Strimzi Kafka **k8s operator** and **Helm**.
- **Alerts**: Implemented in-house aggregation and dashboarding of alerts using Alertmanager and Alerta.
- **Calico**: Worked closely with the network team for multiple **stability fixes** in the onprem k8s clusters.

INTERNSHIPS

Facebook   London, UK
Production Engineering Intern   *Jun 2017 – Sep 2017*

Worked with the MySQL Infrastructure team on the continuous **backup and restore system** to scale the deployment to multiple pools having different MySQL versions, configurations, etc.

IIIT Hyderabad   Hyderabad, IN
Student Systems Administrator   *Aug 2016 – Jun 2018*

Moved infrastructure (including Zimbra mail servers) to **high availability** setups using DRBD disks and Pacemaker, fail2ban based applications, institute-wide web proxy, LDAP, etc.

Berkman Klein, Harvard University   Remote
Google Summer of Code   *May 2016 – Aug 2016*

CodeChef / Directi   Remote (Mumbai, IN)
Software Engineering Intern   *Dec 2014 – Sept 2017*

EDUCATION

IIIT Hyderabad   Hyderabad, IN
B.Tech and M.S. by Research; credits completed, pending thesis; GPA: 8.02/10   *Jul. 2014 – Jun. 2018*

PROGRAMMING SKILLS

Languages: Python, Bash, Javascript, Ruby

Technologies: Kubernetes, Docker, Grafana, Argo, ElasticSearch, Kafka, Conda, PyTorch, Flask, Django