

Saswata Mukherjee

SWE interested in Observability, Distributed Systems, and OSS

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SKILLS

Languages

Golang, SQL, JavaScript, TypeScript, HTML, CSS

Databases

TSDBs, PostgreSQL, SQLite, Redis, MongoDB

Libraries/Frameworks

go-chi, Echo, Node.js, React.js, Next.js

Concepts

RESTful APIs, gRPC, Observability, Monitoring, SLOs, GraphQL






Tools

Git, GitHub, Docker, Prometheus, Thanos, Grafana, Observatorium, Kubernetes, OpenShift, Build Tools, CI/CD

EXPERIENCE


Red Hat, Associate Software Engineer




Jan 2022 – present

- Working on [Observatorium](#) , a distributed open-source observability SaaS, in the OpenShift Monitoring Team.
- Engineering a scalable & multi-tenant system that allows ingesting, using, and storing observability signals on Kubernetes and makes it easier to correlate data.
- Focusing on metrics and running a managed service. Working with components like Thanos and Prometheus, primarily building with Go. Involved in a 24/7 on-call rotation and responsible for incident management.
- Joined after an internship, during which designed and architected a CLI which is now used as the de-facto way of interacting with Observatorium SaaS, [obsctl](#) .
- Currently an open-source maintainer for [Thanos](#)  (CNCF incubating project), [Observatorium](#) , and other [libraries](#) .

Google Summer of Code @ Cloud Native Computing Foundation (Thanos),


May 2021 – Aug 2021

Mentee 

- Developed [mdox](#) , an open-source tool for smart automation of project documentation and website, built with Golang.
- Features robust markdown formatting using GitHub Flavored markdown spec, transformation, and fast link checking with smart validators.
- mdox is being used as a CI/CD automation tool for maintaining documentation in notable CNCF open-source projects such as [Thanos](#)  and [Observatorium](#) . Currently, a maintainer for this project as well.

MayaData (now ChaosNative), Software Engineer Intern

Aug 2020 – May 2021

- Developed UI components and screens and architected code refactoring for data-intensive dashboards of [LitmusChaos](#) , an open-source Cloud-Native Chaos Engineering Toolkit for SREs, as well as Kubera, a single-click enterprise Kubernetes automation solution.
- Transitioned frontend codebases for detailed Chaos Engineering dashboards to use a custom in-house component library, Kubera-UI, using technologies like React.js, Material-UI, TypeScript & StoryBook.

PROJECTS

ConfigMap Operator, Go, Kubernetes client_go, Observability

- Kubernetes Operator which allows you to update ConfigMaps, based on some external URL/file path that serves the required data. Useful for high-velocity updates to the configurations without having to update ConfigMaps manually.
- Also provides metrics, traces, and logs.

Quote Search Engine, Golang, Elasticsearch, Next.js, TypeScript

- Scrapes Goodreads quotes and indexes data into Elasticsearch for robust text analysis using Golang, with CLI and frontend web application present, for easy interaction with analyzed data.

React Job Board, React, Node.js, Express.js, Redis, Cron, Material-UI, TypeScript

- Lists jobs using the GitHub Jobs API by caching data from the API into Redis and updating it using an hourly cron job. Thus, avoids repetitive network requests to the API and improves latency considerably.

EDUCATION

Kalinga Institute of Industrial Technology, Bachelor of Technology (B.Tech)

Jul 2019 – May 2023


- Final year (8th semester) student majoring in Computer Science and Engineering with a GPA of 9.53/10.0.

Delhi Public School, Ruby Park, CBSE

Jan 2006 – Apr 2019

- Graduated CBSE with 93.4% (9.35/10.0 GPA) in Science with Computer Science stream.

CERTIFICATIONS

• [KubeCon EU'22 - PrometheusDay Speaker](#) 

• [AWS Fundamentals](#) 

• [GCP QwikLabs Skill Badges](#) 