Sachin Kumar Singh

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EDUCATION

Guru Gobind Singh Indraprastha University

Bachelor of Technology (Information Technology), CGPA: 8.4

New Delhi, Delhi Aug. 2018 - June. 2022

Experience

 HackerRank Bengaluru, Karnataka June 2021 - Present

Software Engineering Intern

https://www.hackerrank.com/

• HackerRank is a technology hiring platform that is the standard for assessing developer skills for over 2,000+ companies around the world.

• Working with the community and the DevOps team on infrastructure and backend, improving internal tooling and developer experience.

• Linux Foundation (LFX) Mentorship

SPIFFE/SPIRE

Feb 2021 - May 2021

Intern at CNCF (Cloud Native Computing Foundation)

https://mentorship.lfx.linux foundation.org/mentee/8375a914-cef9-4031-a718-d58d3 fac 013b+cef9-4031-a718-d58d3 fac 013b+cef9-4031-a718-d58d4 fac 013b+cef9-4031-a718-d58d4 fac 013b+cef9-4031-a718-d58d4 fac 013b+cef9

- o SPIFFE, the Secure Production Identity Framework For Everyone, provides a secure identity, in the form of a specially crafted X.509 certificate, to every workload in a modern production environment.
- Worked on SPIFFE/SPIRE (https://spiffe.io/) project to design and implement a new health check subsystem in SPIRE.
- Implemented readiness and liveness checks for each subsystem to be aggregated and used for global health check of SPIRE.

• Google Summer of Code'20

The GNU project

Student Developer at GNU-Astro

May 2020 - August 2020

https://summer of code. with google. com/projects/#4950581673721856

- o Implemented a library and a CLI interface to inter-convert different distortion types present in different astronomical datasets providing uniformity when different software are used in an analysis pipeline.
- o Implemented a space efficient index-based k-d tree for easy preprocessing of large astronomical datasets before matching.
- Implemented a multi-threaded matching algorithm to match objects (stars and galaxies) in a query dataset to a reference dataset.

## Projects

- URL Short (https://github.com/sachinkumarsingh092/urlshort)
  - o A URL shortening tool that uses YAML files from users and makes custom paths from them.
  - o Can be used as a local binary or deployed on the cloud using docker and Kubernetes.
  - o Built using Golang, Docker, Kubernetes, Make, Google Kubernetes Engine (GKE).
- Otaku-chat (https://github.com/sachinkumarsingh092/Otaku-chat)
  - A realtime chatting web application with multiple chat room functionality.
  - Features include creating and joining multiple channels, saved sessions after closing the browser, and deleting sent messages.
  - o Built using Flask, Javascript, FlaskSocketIO, jinja templating, Bootstrap CSS, PostgreSQL, and hosted on Heroku.
- Book Reviewer (https://github.com/sachinkumarsingh092/book-reviewer)
  - o Book reviewer is a web application allowing users to register themselves and rate and review books from a large catalog of
  - o Built using Flask, jinja templating, Bootstrap CSS, PostgreSQL, goodreads developer-API and hosted on Heroku.

## Achievements

## • Paytm Build for India Hackathon

Won the  $1^{st}$  runner-up prize out of a total of 40 teams participating.

## Programming Skills

- Languages: C/C++, Python, Javascript, SQL, Shell scripting, Java, HTML, CSS, Golang, LATEX, Make
- Tools/Framework: GNU/Linux, Git, Heroku, Docker, Kubernetes, Google Cloud Platform (GCP), Flask, Travis CI, Jenkins, Terraform, AWS