

Kumar Shivendu

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Skillset

Languages Python · JavaScript · Go · Java · Dart · C++ · Bash
Frameworks Django · Node.js · React · Flutter · Material UI · Bootstrap · Tailwind
Miscellaneous Docker · PostgreSQL · Redis · Elasticsearch · AWS · Figma · Pytest · Cypress

Experience

Software Engineer @ SuperTokens (YC 20)

Mar. 2022 - Present

- SuperTokens is a highly customizable authentication tool that is growing fast with **8k+ stars on GitHub** and **thousands of B2B SaaS customers**.
- **Architected one of its kind Multi-factor authentication (MFA) framework** and Time-based OTP recipe
- Implemented customizable recipes for email verification, dashboard, user roles (RBAC), and user metadata.
- Introduced email/sms delivery, SDK logging, new integration tests, and deployed hotfixes for bugs reported by our users.

Backend Engineer Intern @ FamPay (YC 19)

Sep. 2021 - Mar. 2022

- FamPay is India's first numberless card and payments app for teenagers with **10M+ users** on the platform.
- Refactored code and unit + integration tests related to UPI payments, KYCs, and asynchronous celery batch jobs.
- Researched the bottlenecks in our AWS Redshift setup and the ways to optimize it for better resource utilization on **tables with 1B+ rows**.
- **Saved 50k\$+ annually on Anomaly Detection using an open-sourced tool:** Chaos Genius (YC 20) instead of Anodot or AWS Cloudwatch.

Google Summer of Code Student @ Software Heritage

May. 2021 - Aug. 2021

- Software Heritage (SWH) is an ambitious project by Inria (Paris) to collect and preserve all of the open-source software that ever existed.
- Developed **advanced metadata search features on top of 200M+ public software repositories containing 14 Billion+ source code files!**
- Ingested metadata of 200M+ software repositories from Kafka and RPC APIs of multiple services into Elasticsearch cluster.
- **Designed a custom search query language** and wrote a translator that **converts the Abstract Syntax Tree (AST) into Elasticsearch queries**.
- Implemented autocompletion for the custom query language in the web interface using WebAssembly, Javascript, CSS, and Django.
- Wrote unit and integration tests using Pytest and Cypress for multiple services while maintaining 100% test coverage.

SDE Intern @ Logy.AI

Feb. 2020 - Jul. 2020

- Developed the **appointment booking portal for Colgate (Nigeria) MyToothDoc service** using Django. (**100k+ users**)
- Revamped the internal Image data annotation platform using Django and multiple Javascript libraries.
- Doubled the speed of the malaria detection APIs by implementing an OpenCV-based blurry microscopic image detector.
- Developed a **bridge service using web sockets to interlink Whatsapp chatbots with our customer support dashboard**.

Data Scientist Intern @ IIT Mandi

May. 2019 - Jul. 2019

- Trained ML models using Keras and Tensorflow to forecast network usage time-series data.
- Developed the foundation for our **research paper that got accepted by IEEE**.

Side Projects

Activity-Tracker

- An **ecosystem of applications that continuously track and pull usage data** across browsers, IDEs, desktop, and mobile apps
- Tech Stack: NodeJS, Electron, Flutter, MongoDB, React, Material UI

DukanHelp

- Mobile (Flutter) and web based invoicing and inventory management app for small businesses.
- Tech Stack: Flutter, Flask, JS, Bulma, GSheets API, SQLite

Open source contributions @ Software Heritage

- Created linters to crawl and ingest code from Fedora packages (.rpm files), Gogs (code hosting platform), and Hex.pm (Erlang package manager).
- Mentored an intern during Google Summer Of Code 2022
- Received **Open Source Peer Bonus award from Google for my contributions**

Technical blogs

- In-depth look at ACID properties of Postgres: [Link](#)
- Exploring Data Structures in Redis [Link](#)
- Pub/Sub VS Queues using Kafka and RabbitMQ [Link](#)

Other projects

- doctree: A parser-based documentation generator for any language with symbol search. Written in Go with @slimsag (800+ stars)
- vscode-advanced-search: VSCode Extension to do a bulk search/refactor which is impossible with regex. **Winner in FOSS United Hackathon**
- browser-semantic-search: Chrome ext. that enhances existing search features of any website using GPT3/4 and its embeddings!

Education

Indian Institute Of Technology (IIT) Bhilai

Bhilai, India

BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING

Jul. 2018 - May. 2022

CGPA : 8.2/10.0