# SOUVIK KAR MAHAPATRA

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## EXPERIENCE

**Tyup**                                                                                       Remote
*Lead Back-end Engineer*                                              *June 2021 – Present*

- Developed whole back-end system from scratch. Token based authentication(JWT), feed based on institution visibility, email OTP system using redis, Reset and forgot password, Protection against vulnerabilities like XSS, HPP and IDOR.
- Integrated nginx as reverse proxy
- Dockerized the whole application using docker-compose
- Integrated AWS S3 with in-server authentication to prevent unauthorised access to tyup resources.
- Migrated all the data from old MongoDB instance to New MongoDB instance.
- Serving 500+ active users and survived various injection attacks easily.

**MnyRate**                                                                                   Remote
*On Contract*                                                               *April 2021 – May 2021*

- Developed session based authentication, API endpoints for various operations on post on user profile
- Developed admin dashboard.

## PROJECTS

**lsx (ls-Xtended): CLI to navigate through terminal with ease**  [ Go, Shell ]          October 2021

- **Problem:** It's a pain to cd and ls multiple times to reach desired directory in terminal and makes the whole navigation process slow
- **Solution:** lsx allows smooth navigate and search directories on the go with just one command. Create alias for desired directory. Ranks most visited directories for better accessibility.
- 100+ stars on github with active contribution from users

**gh-retrieve: Download specific directory in a public GitHub repository** [ NodeJS ]          April 2021

- **Problem:** Github won't let you clone or download any specific directory or sub-directory in a repo.
- **Solution:** Nodejs module to download any specific directory or sub-directory in a public GitHub repository. Recursive download, uses github API, doesn't maintain any repo workflow. Sparse download, uses git installed in system, maintains git workflow of the target repository.
- 150+ downloads on npm.

**gofuzz: web url fuzzer**  [ Go ]                                                          March 2021

- **Problem:** While solving CTFs it was annoying to test URLs for IDOR, HPP and other injections attacks manually and check their status codes.
- **Solution:** Test for numbers within a certain range, ascii characters and inputs from files. Uses golang's concurrency for fast fuzzing. Categorises inputs as per the status code. Export result to various file formats for further automation.
- 30+ stars on github

**web-SS: Screenshots of the websites in bulk** [ NodeJS, Express, EJS ]          November 2020

- **Problem:** Takings screenshots of multiple pages of website for showcase purpose is a lot of work to do.
- **Solution:** web-SS takes multiple URLs as input, generates screenshot in bulk automating the screenshot process. Support for viewport and long screenshot with custom dimentions.

**eyeson: minimal file watching action trigger CLI** [ NodeJS ]          October 2020

- **Problem:** It is tedious to make changes to program, compile & run multiple time manually
- **Solution:** eyeson watches file for any changes which triggers some command provided by user. Can watch multiple files. Works with glob patterns.
- used by 100+ downloads on npm

**asker: A collection of interactive command line user interfaces for C++** [ C++, Makefile ]          September 2021

- **Problem:** Inspired by inquirer, no such library for C++
- **Solution:** Asker provides command line interface like confirm prompt, dropdown, multi-select dropdown, password input, masked input, normal input with and without validation.

## Technical Skills

**Languages**: JavaScript, C++, Go, Bash, Python
**Languages(Familiar)**: TypeScript, C, Rust
**DB**: PostgeSQL, SQL, MongoDB, Redis
**Frameworks**: NextJS, gRPC, React, Svelte, Echo, Gin
**Developer Tools**: AWS(S3, EC2) , Docker, Nginx, Github Actions

## Education

**Kalinga Institute of Industrial Technology**                                         Bhuvaneshwar, Odissa
*Sophomore year, B.Tech in Information Technology*                  *September 2020 – Expected July. 2024*