

Software developer

SHREYAS KAPALE

HELLO WORLD

I really like building things for people. I write good code! based on SOLID principles. I am passionate, people friendly, creative and hardworking.

EDUCATION

College - KLS Gogte Institute Of Technology, Belgaum - Bachelor of Computer Science and Engineering
Courses - OOPS in Java and Python, DSA in C,DBMS and Compiler Design.
Electives - Advanced Algorithms, Information Security & Networking, Cloud Computing, Software Testing.

WORK EXPERIENCE

Informant Networks | Software Developer (Internship) | August 2017 - October 2017

- Router development, working on OpenWRT Linux.
- Multi-threaded ICMP link monitor with uptime statistics (service for cloud router) which helps in knowing if a link/iface is down.
- Writing make files for Openwrt packages to run on different embedded boards.
- Firmware update system with SHA based integrity checks, helped in simple secure update.
- Development of real-time graphs and dashboard development.
- Written memory efficient robust code for router control using PHP, OpenWRT UCI & LUA helped in **decreasing compute and memory usage of embedded router by more than 50%**.

Infigon Futures | Full Stack Developer (Contract) October 2020 - January 2021

- Built microservice's with FastAPI and containerized on EC2 with docker and load balanced using AWS ELB built a CD/CI pipeline integrated with AWS ECR.
- Built and deployed machine learning API's for personality testing (used for career guidance).
- Wrote automated python web scraping scripts
- Built screens and integrated APIS for Flutter mobile and web.

Finclus | Technology Consultant | June 2021 - December 2021

- Built serverless AWS lambda functions - OCR for Aadhaar and Pan card with Dynamo DB and S3 information store pipeline.
- Implemented barcode screen for Node JS based package - a authentication SDK for Finclus App.

Synth YC 21 | Software Engineer | October 2021 - Feb 2022

- Wrttten ticket queue based micro-services for async transcription and async diarization, with optimized transcript stitching function.
- Nvidia Riva SDK deployment on g4dn.xlarge, and written load testing automation scripts for Nvidia RIVA GRPC server for Speech to text (ASR)
- User authentication using Oauth PKCE for Electron using AWS Amplify (cognito) with login providers like Google sign in and Apple sign in.
- Writing S3 Policies, Configuring Route53, Google calendar & task's API Integration, Azure batch transcription Integration.
- Worked on front-end API integration.

DSSPL Yellow | Lead Software Developer (Full time) | March 2022 - Present

SKILLSET

- Micro-services, Restful API's with Authentication & Cloud DevOPS
- Programming languages - Python, Javascript, C++, C, Go, Java.
- Frameworks/OS/Tools - NodeJS, Go-Gorilla/MUX/schema/handlers, Flask, FastAPI, Express, Django, Redis, Nginx, AWS (Lambda, DynamoDB, S3, EC2, IAM, BOT0, ECR, Route53, ELB, Amplify), Flutter, Cordova, Firebase, MongoDB, Influx DB, MySQL, React, NextJS, OpenWRT, Jenkins, OpenTelemetry, CD/CI OpenCV, Dask, Scikit-Learn, Docker, Basics Of Kubernetes, OpenWRT, Wireshark, TCPdump, Etherape, JQuery, Tailwind, Bootstrap, Bash, Linux, Github-actions, Trello, Jira, Git & etc...

TECHNICAL PROJECTS

Bharat Sentinel - Firewall & Antivirus built using Flutter, JAVA android native, Firebase & Python. Unique feature - It generates a local vpn server to make a loopback to isp so that the app can disallow apps based on rules.

Rekori - DevOPS tool for capturing Events and process metrics. Built using FastAPI and InfluxDB

Shortest Path Visualiser - Pure Vanilla Javascript, CSS and HTML5 based BFS implementation for shortest path visualisation.

Bottles - A wholesaler inventory app built using Flutter & Firebase.

Natural Language to Flutter App - OpenAI GPT3 Based natural language to flutter UI generator built in Python.

JIO-FiberAPI - A unofficial python package for JIO Fiber Router, to control it via python.

MYQID - Complete QR based visiting card generator with Location sharing Flutter App.

GITSY - A Complete student profile, placement and skills manager with notification system built for my college with student and placement cell roles. Stack - MongoDB, React, Express, Nodejs, JWT auth.

NOTABLE ACHIEVEMENTS

- Gold winner at National level - INSEF fair hosted by Science Society of India, winner among 100+ teams building a robotics project with computer vision and decision making capabilities . (INSEF - Indian Science & Engineering Fair)
- Recognized By Science Society Of India and Rotary Club for Innovations.
- Was invited to BARC - Bhabha Atomic Research Centre as a mentee for a robotics project.
- 2 Times Gold Winner at state level INSEF fair (for novel mechanical based mobile charging shoes, patent pending, and RPI based discovery robot)
- Received Social Innovation Award from Science Hack Day India (for Computer vision based anti bunking system).
- Winner of various inter-college hackathons and paper presentations.

LEADERSHIP ROLES

- Coordinator at (BelPY, PyData and PyGIT) Belgaum.
- Mentor at PyCon India 21 & Science Hack Day 17,19

TALKS

- PyFlames 21 - Converting normal routers into cloud routers.
- PyCON India 21 - Introduction to distributed computation using dask.
- Avalanche 2020 - Heart disease detection using KNN
- Avalanche 2019 - RCNN, region based convolutional neural networks.
- Science Hack Day 2017 - How to start programming as a teen.