# **Shivam Singha**

in shivams100 shivamsingha

# **Summary**

Full Stack Web & Mobile App Developer with experience in developing cross-platform products, exploring MLops, AIoT & Embedded Systems, love contributing to open source projects in free time.

# **Education**

## **Central Institute of Technology Kokrajhar**

2019 - 2023

Bachelor of Technology (BTech / BE)

Computer Science and Engineering



Cliently August 2021 – April 2022

Full Stack Javascript Developer & MLops Engineer

Remote

- > Made interactive plots for advanced data science. Created high-performance custom data tables.
- > Moved existing application to a microservice architecture based on AMQP & scaled ML pipelines.
- > Refactored a massive Reactjs codebase, optimized re-renders & improved performance by 500%.

ProtonAutoML April 2021 – August 2021

Full Stack Javascript & Python Developer

Remote

- > Made a full stack web app for Timeseries machine learning & prediction.
- > Refactored ML code written in python. Created AutoML pipeline for Timeseries analysis.
- > Worked with Data Scientists to create ML Pipelines from Jupyter Notebooks and integrate with web app.

Webcited December 2020 – March 2021

Full Stack Javascript Developer

Remote

- > Created a one-click web host migration solution with a web app & browser extension.
- > Created a zero code PaaS form submission system to be used after migration.

# **△** Projects

#### AloT food storage management system

#### github.com/shivamsingha/aiot-food-storage

> IoT & ML with real-time monitoring to control the storage silo's climate, detect pests, predict food spoilage and reduce wastage. Arduino, Laravel, FreeRTOS, MQTT, and sklearn used.

## **Titanic Survival Predictor**

#### github.com/shivamsingha/titanic-survival-predictor-react

> An end-to-end Machine Learning pipeline with a web app that predicts whether a Titanic passenger with given data would have survived the crash. Made using React, expressjs, python, and sklearn.

## **CIT Unofficial App**

## CIT Unofficial App on Google Play Store

> A React Native app that notifies users when new info is posted on the CIT website and saves notices locally. Data is collected by web scraping using Nodejs.

#### Math expression solver with steps

## github.com/shivamsingha/mathexpsolver1

> Written in python, this step-wise math solver solves basic mathematical expressions by following BODMAS/PEMDAS. One unique feature of this solver is that it also supports floating point numbers (decimal numbers) and produces accurate step-by-step solutions with descriptions for each step.

## Minimal Smart Home system from scratch

## github.com/shivamsingha/smarthome

> Minimal cheap smart home system made from scratch allowing remote control of lights or any plug outlet. Runner up at Jawaharlal Nehru Science Exhibition 2017-18. Made using C, PHP, and JQuery running on Raspberry Pi.

# ¢å Skills

**Languages, Data Science & Al** Javascript, Typescript, Python, C, C++, Java, SQL, PHP, R, Tensorflow, sklearn **Web, Mobile & Native** React, React Native, Nextjs, Nodejs, MongoDB, Redis, Postgres, Android, Electron, GTK **IoT** FreeRTOS, CircuitPython, Arduino, Raspberry Pi, Espressif ESP Platform

Infrastructure AWS, GCP, Nginx, Docker, Kubernetes, Serverless, Linux, DevOps, Microservice, RabbitMQ

## **Certifications**

NPTEL Python for Data Science NPTEL19CS59S41410092

NPTEL Practical Machine Learning with Tensorflow NPTEL19CS81S31410048