# Suryaansh Rathinam

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## **EDUCATION**

#### •Bachelor of Technology in Computer Science and Engineering

2020-24

Manipal Institute of Technology, Manipal

CGPA: 9.43

#### WORK EXPERIENCE

## •IEEE IIT Kharagpur Section

Jun 2023 - Aug 2023

Research Intern

Remote

- Worked on a research project based on Image Segmentation and Deep Learning
- Built a dataset of medical ultrasound images and a deep learning model to perform image segmentation on the same, obtaining an accuracy of 99.29 percent.

•Moneyflo Mar 2023 - Present

Full Stack Developer

Remote

- Worked on the Frontend of the Web Application using NextJS along with Firebase
- Worked on building RestAPI endpoints based on FastAPI as well as the NestJS Frameworks.
- Worked with AWS, primarily utilising s3, ec2 and lambda gaining hands-on experience in real time projects.

•PE Front Office

Dec 2022 - Jan 2023

 $Web\ Developement\ Intern$ 

Remote

- Worked primarily on the Frontend of their client facing Help Centre, working on implementing new features as well as cleaning the user interface to make it more pleasing for their clients, as well as improving the user experience.

•Ridecell May 2022 - Aug 2022

Software Engineering Intern

Remote

- Worked as a part of the QA and automation team working on both API and Mobile Testing.
- Worked primarily using Python, Selenium, Pytest, and Appium to ensure smooth functioning of the API endpoints as well as the mobile app functionality.

•Apice Tech Apr 2022 - Jul 2022

FullStack Engineer Intern

Remote

- Worked on creating clean, reusable, and responsive components for the UI of their product. Also worked on the server side of their Application in Java (Springboot) and wrote unit tests for various microservices.
- Worked with React JS and Java to ensure a clean UI of the website and a smooth functioning server.

•SantaNet Aug 2021 - Jan 2022

Web Developement Intern

Remote

Over the course of my part-time internship at SantaNet as a WebDeveloper, I worked as a part of a team of 4 developers, working primarily on the Frontend of the Website for this NGO, using ReactJS.

## **PROJECTS**

#### •PsychUp

http://psychup.org.in/

- Led a team of 4 members, and worked on building a platform to bring to life the idea of increasing awareness regarding the field of mental health. Worked primarily with MongoDB, ExpressJS, ReactJS and NodeJS.
- After extensive research, worked on including a comprehensive Personality Test as part of the platform based on the Myers-Briggs Personality Test.

## •DataGrad

https://datagrad.netlify.app/

- Worked on building a platform to provide users with information regarding the top courses on particular topics across a variety of MOOC Platforms (Recommender System). Worked primarily using ReactJS, Flask, Python, Pandas, sklearn, CSS, and Bootstrap in a team of 4 individuals to complete this project.
- The backend features a custom ML-based Recommendation API developed through the Python-based Flask framework. The front end of the application is based on React Js, HTML CSS, and Bootstrap.
- Succeeded in providing students with a one-stop platform to scan a multitude of MOOCs and gain information regarding the top courses of the skill they wish to learn.

#### •Decrypt

- Built a website for D3crypt: IEEESBM's annual cryptic hunt, working primarily with MongoDB. NodeJS, ExpressJS, React JS, CSS, and Bootstrap
- Worked on centralized state management of the application using Redux, efficiently handling Routing. Also handled Database Management on MongoDB Cluster and AWS S3 to ensure scalability.
- The D3crypt competition was conducted successfully on the website, with around 200 people registering for the same and actively participating. Experiencing a smooth user flow and experience on the website.

#### •Certman

- An in-house portal to generate online certificates for all events conducted by IECSE Manipal, MIT's official Computer Science Club.
- Optimized the tedious manual process of sending certificates to attendees. In-app features include uploading participant's details in xlsx file format, dynamic layouting of certificate templates, generation of individual certificates, and mailing.
- Developed the backend API routes for certificate generation, authentication, data uploading, parsing and mailing.
   Worked on certificate verification using QR Codes, and used AWS S3 for scalability.

## RESEARCH EXPERIENCE

#### Analysis And Comparison Of Different Frontend Frameworks

Published in Springer CCIS Vol 1804

- •Survey of the use of AI models and techniques in the analysis and prediction of neuro-degenerative diseases

  To be published in: IOP Journal of Physics Conference Series
- •Exploring IoT-Blockchain Integration in Agriculture: An Experimental Study

Submitted to IEEE Access: Under Review

•A Comprehensive and Systematic Study on Soil Quality Analysis and Crop Yield Prediction Using ML Algorithms

Submitted to Smart Agricultural Technology Journal: Under Review

#### TECHNICAL SKILLS AND INTERESTS

Languages:C/C++, Python, Typescript, SQL, Bash, Java

Frameworks/Tools: MongoDB, ReactJS, NextJS, Angular, AWS, Docker, Git, Selenium, Appium, NodeJS, Tensorflow, PyTorch

**Relevent Coursework**: Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Database Management System, Software Engineering.

#### OTHER EXPERIENCE

#### •Manipal Open Source Society- Technical Head

Aug 2022 - Aug 2023

- Was a part of the board of the Manipal Open Source Society, the official open source club of MIT Manipal, in the capacity of Technical head
- Oversaw the overall functioning of the Technical domains of the club.
- Worked on conducting events and workshops to increase awareness regarding Open Source.
- Worked on mentoring and guiding junior members of the club as they enhanced their professional, technical skill sets.
- •Participated in and won prizes in a number of intra-college and inter-college hackathons.