Suryaansh Rathinam

Github LinkedIn Website

Education

- **BTech. Computer Science Engineering** — *2020-2024*
  Manipal Institute of Technology — *CGPA: 9.43*
  (Rank 14 out of 252) — *Received Achiever Scholarship for Academic Excellence*

Research Experience

- **Analysis and Comparison of Different Frontend Frameworks:** Springer CCIS Vol 1804 DOI: 10.1007/978-981-99-2264-2_19
- **Survey of the use of AI models and techniques in the analysis and prediction of neuro-degenerative diseases:** IOP Journal of Physics Conference Series. DOI: 10.1088/1742-6596/2571/1/012022
- **Exploring IoT-Blockchain Integration in Agriculture, An Experimental Study:** IEEE Access. DOI: 10.1109/ACCESS.2023.3334726
- **A Comprehensive and Systematic Study on Soil Quality Analysis and Crop Yield Prediction Using ML Algorithms:** Submitted to Smart Agricultural Technology Journal: Under Review

Work Experience

- **IEEE IIT Kharagpur Section** — *Jun 2023-Aug 2023*
  Research Intern — Remote
  - Prepared a dataset of medical ultrasound images and pre-processed the input data to obtain clean input images.
  - Built a U-Net deep learning model to perform image segmentation on the same.
  - Obtained a testing accuracy of **99.29%** and presented my results for the project.
- **MoneyFlo** — *Mar 2023-Present*
  Full Stack Developer — Remote
  - Worked with **NextJS, Firebase** on client side of the application and built Rest API endpoints using **NestJS** and **FastAPI**.
  - Worked with **AWS**, primarily utilising S3, Lamba and EC2, to store and process large quantities of client data.
- **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.

Projects

- **PsychUp**
  - Led a team of four individuals to build a Platform using **MERN Stack**, to increase awareness regarding mental health.
  - Primarily focused on building efficient REST API endpoints and clean UI to facilitate satisfying user experience and .
  - Further included a comprehensive Personality Assessment Test in the same based on the Myers Briggs Type Indicator.
- **Certman**
  - Built an online certificate generator using **MERN Stack** along with **TypeScript**.
  - Solved a problem of mass generation and distribution of custom certificates prevalent in college.
  - It allows users to upload certificate templates, generate certificates in bulk via csv upload and distribute the same via email.
- **DataGrad**
  - Built a platform providing users with information regarding the top courses on particular topics across MOOC platforms.
  - Frontend was built using ReactJS and backend server using Flask.
  - The Flask backend connects to an ML Recommender model built, which obtained data through web scraping with Selenium.
- **Revels 2023**
  - Was the team lead of a team of 10 individuals working on the website for the official cultural fest of the institute.
  - Worked on the frontend and backend of the web application using MERN stack encompassing in it a variety of features.
  - Served a total of **8000+** users over the duration of the fest, from registering in events, to participation, scoring, judging and purchasing of tickets, our web application was a centralised solution catering to these variety of use cases
- **Web scraping and Automation Tool**
  - Built a tool using **Selenium** and **Python** to automate and simplify the process of data collection and formatting from the university portal, earlier done manually by professors across the university.

Other Relevant Experience

- **Manipal Open-Source Society:** — *Aug 2022-Aug 2023*
  - Led university's open-source society as the Technical Head, overseeing all technical domains.
  - Organized open-source events and workshops to promote awareness and enhance interest in the field.
  - Worked on guiding and mentoring junior members of the club as they worked on enhancing their skill set.
- **Secured 1st position in inter-college hackathon Devsprint conducted by ISTE Manipal.** — *Mar 2023*
- **Secured 2nd position in inter-college hackathon Exodus conducted by IEEE Manipal.** — ` *Nov 2022*
- **Shortlisted for Stanford University's prestigious Treehacks hackathon.** — *Feb 2023*