SARANG SRIDHAR

Email : f20200297@pilani.bits-pilani.ac.in / sare.sri01@gmail.com
Phone: +91-9952982016
Website : sarang-sridhar.github.io

EDUCATION			
Bachelor of Engineering, with Honors, in Computer Science	2020-Present	Birla Institute of Technology and Science, Pilani, India	GPA: 8.12/10

KEY COURSEWORK	Machine Learning (Coursera), Data Structures and Algorithms, Database Systems, Operating Systems, Principles of Programming Languages, Theory of Computation, Computer Architecture
TECHNICAL SKILLS	Python (Numpy, PyTorch, Tensorflow, Pandas, Django), Javascript (Query, Node.js, React, Redux), SQL, CSS, HTML, Git, Firebase, Java, LaTeX, ROS , Gazebo

RESEARCH EXPERIENCE

Lung Cancer Detection and Segmentation | **Advisor: Prof Vinay Chamola, BITS Pilani**   **May 2022 - Present**
- Applied transfer learning to finetune a large pretrained convolutional neural network, HR-Net, to the LIDC-IDRI dataset of CT scans to detect and segment lung cancer nodules.
- Proposed a novel solution to extract and compose both features and probabilistic predictions from various CT scan images of a patient to improve detection accuracy and segmentation IoU.

INTERNSHIPS/WORK EXPERIENCE

Incoming Research Intern | Philips Healthcare | **Bangalore**   **May - Jul 2023**

Web Development Intern | **Carscan.ai | Core Product Squad | Pune**   **May - Jul 2022**
- Carscan focuses on using machine learning to create an Augmented Reality application which captures the accurate condition of a vehicle, detects damages and generates competitive quotes to fix damages.
- Built a **no-code dashboard** in **React** and integrated **REST APIs** through which the product team could quickly update the web app without having to approach the developers; **Reduced 1+ weeks turnaround time** in app updates.

PROJECTS

InterBITS Sports Meet Website | **Link**   **Mar - Apr 2022**
- A web app for player registration in 48 sporting events; includes a captain allotment portal and a team formation portal for **400+ teams** across **5 campuses of BITS Pilani**.
- Developed an **integrated player signup & payment system** & a customized admin panel for organizers with **React**

The Studyzone Platform | **Link**   **Oct - Dec 2021**
- A student productivity app for **crowdsourcing** academic documents with quality control via user provided feedback.
- Leveraged **Redux** and **React** to enable users to add courses, view documents, and upload their own documents across different platforms. The app has **3000+ verified documents** to serve **5000+ students** in BITS Pilani.

Auction Management System | **Link**   **Apr - May 2022**
- A web app built as a **course project for Database Systems** that allowed users to bid on items. Designed a **4NF-normalized database** capable of **simultaneously handling multiple queries**.
- Developed the frontend in **React** and wrote **dynamic SQL queries** and **REST APIs** in **Node.js** as the backend.

The Taxicab Web Dashboard | **Link**   **Jan - Mar 2022**
- A web dashboard for administrators of BITS Pilani's affiliate taxicab service to analyze overall and individual cab ride statistics in **real-time** and offer students better rates. This service has **750+ completed trips** and **helps 2500+ students**.
- Integrated **REST APIs** in **React** to help admins create trip packages, and offer different rates for different cab types.

ACADEMIC ACHIEVEMENTS	- Top **0.1%** in the BITSAT Examination (among 0.3 million candidates), 2020. - Top **0.1%** in the JEE Mains (2.5 million candidates), 2020 and **1.5%** in the JEE Advanced (0.15 million candidates), 2020.
POSITIONS OF RESPONSIBILITY	- **Teaching Assistant, CS F111 Computer Programming, BITS Pilani, May-Aug 2022**: Conducted labs, doubt clearing sessions and organized quizzes. - **Mentor, Peer Mentorship Program, BITS Pilani, Oct 2021- Aug 2022:** Selected based on academic record, ethics & peer review to guide 7 freshmen mentees in academic and co-curricular pursuits.
EXTRA-CURRIC-ULAR AWARDS	- Won **second prize** in an interschool debate competition **among 50 schools** in 2018.