Arnav Bhalla

LinkedIn• Chennai, Tamil Nadu, 600116 • 1906.arnav@gmail.com • +919041522032

EDUCATION

SRET: Sri Ramachandra Faculty of Engineering and Technology, Chennai — 09/2022 -Present

Bachelor of Technology, Majoring in Computer Science and Medical Engineering. Current **CGPA - 8.35**

Yadavindra Public School: Mohali, Punjab — 2020-2022

Indian Certificate of Secondary Education **(ICSE) Class X - 83.8 %**, Indian School Certificate **(ISC) Class XII – 79.4 %**

EXPERIENCE

Indian Institute of Technology (SGBC), Chennai — Aug 2024 - Oct 2024

Digital Image Processing and Deep Learning Intern

This internship focused on using Brain MRI images of Human Foetuses within a 10 week growth period and helping in the creation of a "Brain Atlas" for foetal brains in the Indian Sub-continent. This internship also inspired the idea to potentially save time while segmentation of the brain from MRI by creating a dataset of Brain MRI and their Segmented Masks, then training supervised learning model for getting a precise output. Skills Gained:

- Basics of Brain MRI imaging, Segmentation Using ITK-Snap
- Dataset Preparation and Finding and using a good model to train for an accurate result.

PGIMER, Chandigarh — Feb 2024 - Jun 2024

Medical Research Intern

This research internship investigated how screen time and sleep habits (quality & patterns) might influence dry eye disease.
Skills Gained:

- Crafting Surveys & Analysing Results
- Exploratory Data Analysis (Using **IBM SPSS 24.0**), Deeper understanding on Reading and Writing a Research Article

This project explored potential connections between Medical Research and Data Analytics, equipping me for future research endeavours.

SRIHER, Chennai — May 2023 - July 2023

Medical Image Processing Intern

- Wrote a program that could find out the amount of malarial parasite infected cells from microscopic images of isolated cells.
- Learnt various skills required for performing Image Segmentation and Pre-processing of an Image using various Python Libraries(**CV2**,**Watershed**, **Scikit-learn**, **Numpy** , **Matplotlib** ,**Scikit-image**).
- Other techniques and skills that I used were application of Filter kernels, Morphological operations, Image Segmentation using K-means.

LEADERSHIP/ACTIVITIES

Event Host, Coding and Hackathon Club , SRET, Chennai — February 2023 - July 2023

- Organized and hosted a dynamic coding competition for 200+ participants of various skill levels.
- Used Multiple Choice Questions, varying in difficulty, answers were to be given in one of these languages:
  C,C++,R ,Java, Python (The Language for answering was given with the question).
- Managed event logistics, ensuring seamless execution and adherence to tight time constraints.
- Received positive feedback from participants, with 87% of them rating the event as "Excellent" or "Good."

PROJECTS

Eye and Face Detection System using Raspberry Pi

- Developed a Face and Eye detection system using Open CV library as the Image processing library.
- Hardware used by my team were Raspberry Pi 4, Raspberry Pi Camera and a SD Card having Raspbian.

SKILLS

Technical Skills	MEAN Stack|ITK-SNAP|Tableau|SQL|HTML|JavaScript|C|C++|Java|Python|Frontend-web Development|IBM SPSS
Soft Skills	Critical Thinking|Problem Solving|Time Management|Flexibility|Accountability|Team Collaboration|Communication
Languages	Hindi |Punjabi |English