

**Program**BTech + MTech (Dual Degree) in Engineering Design

Specialization in Biomedical Engineering

Indian Institute of Technology, Madras Portfolio Link: Portfolio GitHub Link: /fasihere

Indian Institute of Technology

Madras

%/CGPA

7.43

Graduation

2023

EDUCATION AND SCHOLASTICS ACHIEVEMENTS

Institution

Specialization in Diomedical Engineering		iviadius			
XII (CBSE)		Silver Hills Public School	94%	2017	
X (CBSE)		Our Own English High School	9.80	2015	
PROFESSIONAL EXPERIENCE AND PROJECTS					
OkRes Technologies and Research Web Development Intern Oct '20 – Dec '20	Worked as a Web development intern in building a complete e-commerce website for the company.				
Logistic Regression	<ul> <li>As a team of 2, wrote a python program that predicts whether a reactor will operate under given parameters.</li> <li>Without the use of machine learning libraries such as Scikit-learn, we were able to achieve an F1 score of 0.97.</li> </ul>				
Sudoku Game	<ul> <li>Created a Sudoku game using pygame in python, that fetches boards from internet using Beautiful Soup.</li> <li>The Sudoku game has options such as 'new', 'reset', 'solve'. The board is solved using the backtracking algorithm.</li> </ul>				
Blog Website	<ul> <li>Designed a blog website where people can read posts, making use of React JS, Node, Express, MongoDB and Mongoose.</li> <li>Readers can see all posts, or posts according to category. A user can write, edit or delete their own post.</li> </ul>				
Sudoku Digit Recognizer	<ul> <li>Model learns reading digits using deep learning on the MNIST dataset using the TensorFlow library in python.</li> <li>Contours of the board are detected using <b>Opencv</b> library, each small grid is isolated and board digits are recognized using the learned model.</li> </ul>				
Stroke Prediction	<ul> <li>In a team of two, predicted whether a person may have stroke and got a maximum accuracy of 0.9814</li> <li>Compared various models and evaluated their performance based on accuracy and chose the best model.</li> </ul>				
Snake Game	<ul> <li>Created a classic snake game using pygame module in python, where the speed of snake increases with score.</li> <li>The game has features including display of highscore, gameover and retry screens and appropriate sounds.</li> </ul>				
Cricket Bat/Ball Classification	• Classification of cricket bat and ball with an F1 score of 0.985 achieved using a fastai transfer learning model				
RELEVANT COURSEWORK AND SKILLS					
Courses	<ul> <li>Mathematical Foundation of</li> <li>Digital Signal Processing</li> <li>Medical Image Analysis*</li> </ul>	• H	ata Structures and Algor uman Factors in Design inciples of Economics		
Course Labs	<ul><li>Analog and Digital Systems</li><li>Physics of Measurement La</li><li>Control Systems Lab</li></ul>		eometric Modelling and unctional and Conceptua		
Web Development	HTML5 and CSS, JavaScript(React, Node.js, Express)				
Data Science	Python, Data Visualisation(Python), TensorFlow Library, Keras, PyTorch, Image Processing(OpenCV), Scikit-learn				
Software/Languages					
POSITIONS OF RESPONSIBILITIES					
Director, Tensors 2020-Present	<ul> <li>Founder and Director of Tensors, a crowd funded-social projects incubator NGO to use technology for societal benefit.</li> <li>Leading a three-tier team of 4 executives and 30 coordinators in Public Relations, Media and Design teams.</li> <li>Raised 2.58 Lacs through a crowd funding Offline JEE Mock Test event with 22 Coaching institutes and 1800 students.</li> <li>Launched an Online Consulting Program for JEE Aspirants to connect with IITians to clear doubts regarding branch selection.</li> </ul>				
CO-CURRICULAR AND EXTRA-CURRICULAR ACTIVITIES  • NSS Volunteer under 'Teach Your Neighbour', taught mathematics to students of classes 7 & 8					

\*.ongoing course

students.

• Came **Second** in Alakananda Intra hostel Badminton Tournament.

• Came **Second** in **district-level** for One-Act Play in CBSE Sahodaya(2016) in Malabar Region

• Member of Alakananda Hostel basketball team and Engineering Design Department basketball team.

• Became First in Mathematics Common Exam for class V conducted by Our Own English High School, Sharjah participated by over 250