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EDUCATIONAL			
PROGRAM	**INSTITUTION**	**CGPA/%**	**COMPLETION**
B. Tech in Mechanical Engineering	Indian Institute of Technology Madras	7.90/10	2023
XII (HBSE)	Maa Saraswati Siksha Niketan Sr Sec School ,Sakra	89.8 %	2018
X (HBSE)	Government Senior Secondary School, Teontha (Kaithal)	86.4 %	2016

- Secured a position in the top 0.7 percentile in JEE mains

COURSEWORKS AND SKILLS		
Coursework	- Introduction to C Programming(cs1100) - multivariable calculus(ma1100) - Series and matrices (ma1020) - Engineering Mechanics (Am1100) - Strength of materials (me2200) - Principal Of Economics (HS3002) - Differential Equations(ma2020) - Measurements and Instrumentation (me2400) - Machine Learning Specialisation Washington University)		

Skills and Software	Extra Learnings	- Deep Learning (**Nptel YouTube**) - Probability and Statistics for Data Science (**DATA SCIENCE NPTEL**)
	Programming Languages	- Python - JavaScript - PHP - Java - C - C++.
	Machine Learning	- A good understanding of concepts of machine learning and algorithms for regression, classification, and clustering. - Implemented the basic algorithms like, regression and its variants with L1, L2 regularisation, Logistic Regression, Decision Trees and KNN from scratch with python. - Familiar with feature engineering and data analysing techniques - Conversant with **Scikit-Learn**, **NumPy**, **Matplotlib**, **Pandas**, **TensorFlow** Libraries

	Deep Learning	● A good understanding of basic deep learning concepts like backpropagation, regularization, activation functions, loss functions, convolution neural networks, optimization algorithms, and Long Short Term Memory. ● I am able to build efficient training input pipelines for deep learning models in computer vision, GAN, and Time Series Predictions ● Good knowledge of training deep learning efficiently with techniques like Greedy-Layer-Wise-Pretraining.
	Web Development	● having a working knowledge of Html, CSS, JavaScript and frontend styling libraries like Bootstrap ● Worked with react js in a internship. ● Backend: PHP, Django ● Having a working knowledge of querying language SQL is needed for basic projects.
	Others	● I have working knowledge of git and GitHub. ● Having a basic knowledge of CI-CD pipelines with tools like Jenkins. ● A Fast Learner

EXPERIENCE

Machine Learning Developer GoDataInsights **June- Present 2021**	● **GREEN SCORE:** o Built a system with which one can calculate the Greenery Score of an area with longitude, latitude, and radius. o Used open street map to fetch the data for the algorithm. ● **FIRE COUNT PREDICTION:** o Analysed NASA's fire data from the MODIS satellite. o built a fire count prediction system for a region (a longitude, latitude bounding box) ● **CRYPTO PRICE PREDICTION:** o Built a stock price prediction system. But This is different from general stock price prediction systems because it also takes the effect of current news sentiment into consideration and shows its effect on prediction too
Full-Stack Developer , Jivass Tech. **May-July 2021**	● Worked on ReactJS for frontend and Django for backend, the user database was PostgreSQL ● Created Mall Metering React Web Application, with basic features, like authentication system, Dummy Data, Primary Dashboards for Customers, Supervisors (sub admin type role) and Superadmin ● Created Website till alpha phase, as per client demands
Machine Learning **Intern, FTS** **June - July 2021**	● During the Internship, Two datasets were given to analyse. Both datasets had gases and particulate matter but one had hourly frequency and the other has a daily frequency ● Analysed the day-wise data to get an algorithm that can calculate AQI from a gaseous composition ● Built an LSTM based time series prediction algorithm on city-by-hour data.
Full Stack Developer, Chillitray **March - May 2021**	● Worked on building token and OTP-based authentication systems with sessions. ● Implemented HTTP authorisation ● Created API s for sending SMS's, Emails for verifications of accounts. ● Built different types of media and other types of API's as per needs

PROJECTS And Competitions

Text To Image(project)	- The aim is to convert a written text (like "a blue flying bird") into an image - NLP is used to extract a feature vector from the text description. - GANs are used to create images from a combination of feature vector and random latent vector
DLHackTrack **(Hackathon)**	- In This competition, I got 2nd rank. - Here I developed an architecture that can classify images as generated by a GAN or not. - Developed architecture included skip connections, interconnection, Depth wise Separable convolutions.
DCGAN (project)	- In this project in which have implemented DCGAN algorithm from its paper. The data pipeline for training the model is designed in such a way that adding new images will not affect others - This is a project in which one can create custom data of images and train the model. After that new similar image can be generated. - Used combination of convolutions and Up Samples in the forms of the block (Conv2dTranspose) to increase the size of the image
Mall metering **(Project)**	- Used ReactJS and Django stack, with PostgreSQL as database. - Implemented D3 graph for visualization purposes and Interactive data tables. - Backend was designed with REST API's. - Ideation of flow logic, Database design, Creating wireframes for the same.
Univ-AI Loan Prediction (hackathon)	- Participated in a machine learning hackathon by univ ai. - Here I achieved the best score of 0.869 (roc_auc_acore). - The Machine learning model architecture had stacking of 6 base models on a neural network.

POSITIONS OF RESPONSIBILITY

CFI: **Project Member In SBoard, Electrical club**	- Worked in project SBoard as a project member in the software module. - Learned about R-pi, ROS, and Embedded Systems. - Did research for haptic touch and Ultrasonic feedback. Now building software for the user interface and functionality.
WebOps Team coordinator , Mechanical Engineering Association.	- Worked as a coordinator in the web operations team of MEA. - First I learned about HTML, CSS, and JavaScript and then created templates for websites with a team. An improved user interface to give a better user experience
Public Relations -Manager , NSS	- Here working as a PR manager in PR Team Of NSS IIT M - Learning to interact with people of different backgrounds and thinking's.

EXTRACURRICULARS AND HOBBIES

Volunteer-NSS	- In NSS I worked on two projects, - The First project was Project Paws in which we used to feed animals like dogs, cows in an animal dispensary, etc. - The second project was Educational Blog in this project I was supposed to write blogs on
Kabaddi	I generally play kabaddi with my friends. In lockdown, this game has become my hobby