



WORK EXPERIENCE

Machine Learning Intern, Go Data Insights

June 2021 - Aug 2021

- **Project GREEN SCORE:** Built a system with which one can calculate the greenery score of an area with **longitude, latitude**, and radius. Built algorithm for calculating the green score. Used open street map API to fetch the data for the algorithm. Calculated the greenery of an area accurately up to **1km**. [Blog](#)
- **Project FIRE COUNT PREDICTION:** Analyzed NASA's fire data from the **MODIS satellite**. built a fire count prediction system for a region (a longitude, latitude bounding box). Worked with a dataset of around **4 million rows** [Blog](#)
- **Project CRYPTO PRICE PREDICTION:** Built a stock price prediction system. But This is different from general stock price prediction systems because it also considers the effect of current news sentiment and shows its effect on prediction too. [Blog](#)
- Created a robust **python package** for the projects which was directly inserted into the **company's backend**.

Machine Learning Developer Intern, FTS (Failure to Success)

June 2021 - Jul 2021

- Worked on daily and hourly air composition dataset consisting of **1000000 rows**. Analysed data and built a ML algorithm that calculated **Air Quality Index** from gaseous composition.
- Built an **LSTM** based time series prediction algorithm on **city-by-hour** data.

Full Stack Developer Intern, Jivass Technologies

Apr 2021 - June 2021

- Worked on ReactJS for frontend and Django for backend, the user database was PostgreSQL Created React Web Application. Worked a codebase of around **1GB**. Project Included **Dummy** Data Creation, **Primary Dashboards** for **Customers, Supervisors**, and Super admin.
- Created Website till alpha phase, as per client demands

Backend Developer Intern, Chillitray Technologies

Feb 2021 - Apr 2021

- Worked on building **token** and **OTP-based** authentication systems with sessions. Implemented HTTP **authorization**
- 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

Reverse Image Search Engine, GoDataInsights, Currently Working

- The aim of this project to create image + text base search engine for product recommendation.
- Implemented a VGG-16 feature vector-based image vs image comparison system which increase search speed by **10X**.
- * Experimenting with different similarity matrices to improve results.

Project FND, Self, [Link](#)

- The aim of this project is to classify news articles fake or real.
- To get the accurately classified collection of news as real or fake I have built a deep learning **LSTM based** model. After using many training techniques, I got a **validation accuracy** of **0.9387%** with **training accuracy** of **0.9538%**.

Text To Image Generator, Self, [Link](#)

- 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.
- Used GAN to create image from combination of **text embedding (1024)** and **random latent vector (100)**.

Deep Convolutional Generative Adversarial Network , [Link](#)

- The aim of this project is to build model with which one can generate new images after training the model. I implemented DCGAN architecture from its original paper.
- During training model was found robust to result on addition of new images to training set.

SKILLS AND KNOWLEDGE BASE

Programming Languages: Working With- C++, Python, SQL, Worked With- Java, HTML, CSS, JavaScript, PHP, Django, React

Data Science Skills: Feature Engineering, Machine Learning, Deep Learning

Python Libraries: NumPy, Pandas, Matplotlib, Scikit-Learn, TensorFlow, cuDF*, pytorch*

* - currently working

Other: Git, Jenkins, AutoCAD

RELEVANT COURSEWORK

- Deep Learning[#]
 - Introduction To Data Analytics*
 - Probability and Statistics for Data Science[#]
 - Introduction to C Programming
 - Multivariable Calculus
 - Differential Equations
 - Series and Matrices
 - Machine Learning Specialization, Washington University (Coursera)[#]
 - Strength of Materials
 - Measurements and Instrumentation
 - Introduction to Applied mechanics
- [#] Online
* Current semester

EDUCATION

Institute	Degree	Timeline	CGPA/%
Bachelor of technology, IIT Madras	Mechanical engineering	2019 – 2023	7.91
Maa, Sarasvati School, Kaithal	12th Standard	2017 – 2018	89.8
Government School, Kaithal	10th Standard	2015 – 2016	86.4

HACKATHONS

Deep Learning Hackathon, IIT Madras <ul style="list-style-type: none">2nd RankDeepfake Image classification.Developed a convolution architecture with skip connections, interconnection, Depth wise separable convolutions.	Apr 2021
Univ- AI Hackathon, IIT Madras <ul style="list-style-type: none">Roc-AUC score of 0.869Data Augmentations, Feature engineering, classification. Used Stacking of 6 algorithms on top of a neural network.	Mar 2021
Shaastra Hackathon, IIT Madras <ul style="list-style-type: none">Object detection, character recognition. completed the solution	Jan 2021

POSITIONS OF RESPONSIBILITIES

PR Manager, National Service Scheme, IIT Madras <ul style="list-style-type: none">Here working as a PR manager in PR Team of NSS IIT MLearning to interact with people of different backgrounds and thinking’s	Mar 2021 - present
Project Member In SBoard, Electrical club, CFI¹, IIT Madras <ul style="list-style-type: none">Working in project SBoard as a project member in the software module.Learning about R-pi, ROS, and Embedded Systems.Did research for haptic touch and Ultrasonic feedback	Mar 2020 - present
WebOps Coordinator, Mechanical Engineering Association, IIT Madras <ul style="list-style-type: none">Created templates for websites with a team.Improved user interface to give a better user experience	Aug 2019 - Apr 2020

* Currently Working, 1- Center For Innovation

