

PROJECT DIARY

Guide: K. Ashesh

180030120	Vasavi Gannina
180030887	Neerukonda Sai Sruthi
180030956	Chekuri Chekitha
180031226	Hari Priya Puppala

Date	Working Status	Guide/Mentor
5 th August, 2021	<p><u>Previous Work</u>: Pre-processed the data to implement the project (A Review of Object – Based Detection using Convolutional Neural Networks)</p> <p><u>Current Work</u>: Change of project and team mates from the previous semester; Yet to finalize the project we will be working on for this semester</p> <p><u>Future Work</u>: Discuss and agree on a project topic with the guide</p>	
12 th August, 2021	<p><u>Previous Work</u>: Searched up projects to finalize on</p> <ul style="list-style-type: none"> - RMDL: Random Multimodal Deep Learning for Classification - Seismic Facies Analysis using State of the Art Architecture: A Deep Domain Adaptation Approach - Disease Diagnosis using Deep Learning - Nutrition Analysis and Diet Recommendation - Object Based Detection using Deep Learning - Finding out habitable exoplanets from images captured by space vehicles like Kepler - Text Classifier for Hierarchical Attention Networks for Document Classification 	

	<ul style="list-style-type: none"> - Implementation of Deep Learning Modules to Generate Music with Keras, Theano and LSTMs - Reinforcement Learning Approach to Automatic Stroke Generation in Oriental Ink Painting - Secure Recommender Mechanism for E-Commerce <p><u>Current Work:</u> (PROBLEM STATEMENT) Finalized the project with the guide – Text and Document Classification using Hierarchical Neural Networks</p> <p><u>Future Work:</u> Acquiring the datasets and prioritizing the data</p>	
19 th August, 2021	<p><u>Previous Work:</u> Finalized the problem statement with the guide</p> <p><u>Current Work:</u> Reading reference Papers</p> <ol style="list-style-type: none"> 1. Deep Learning for document classification 2. Hierarchical transformers for long document classification 3. Multimodal deep networks for text and image-based document classification 4. A rule-based approach to embedding techniques for text document classification 5. Hierarchical deep networks for text and image-based document classification 6. Comparison of data augmentation methods for legal document classification 	

	<p>7. Hierarchical neural networks for document classification</p> <p>8. Hierarchical attentional hybrid neural networks for document classification</p> <p>9. Automatic document classification</p> <p>10. Hierarchical attention models for text classification</p> <p><u>Future Work</u>: Choosing a reference paper</p>	
26 th August, 2021	<p><u>Previous Work</u>: Downloaded and went through the downloaded reference papers</p> <p><u>Current Work</u>: Choosing one paper as the reference and base paper for the project</p> <p><u>Future Work</u>: Preparation of abstract and introduction</p>	
2 nd September, 2021	<p><u>Previous Work</u>: Read all the downloaded reference papers</p> <p><u>Current Work</u>: Preparation of abstract and introduction</p> <p><u>Future Work</u>: Collecting the data and preparing or constructing a data set</p>	
9 th September, 2021	<p><u>Previous Work</u>: Preparation of abstract and introduction</p> <p><u>Current Work</u>: (DATA STRUCTURE AND SOURCE) Going through the problem statement and understanding the implementation of Neural Networks (the solution) in the project in order to</p>	

	<p>construct a dataset; collecting diverse and unbiased datasets for reference</p> <p><u>Future Work:</u> Pre-processing the data and feature extraction</p>	
17 th September, 2021	<p><u>Previous Work:</u> Exploring the data and understanding the labels</p> <p><u>Current Work:</u> (DATA ANALYSIS) Identifying the labels and features in the data collected; reformatting and augmenting the data</p> <p><u>Future Work:</u> Preparing the tools; training and testing the models</p>	
24 th September, 2021	<p><u>Previous Work:</u> Data analysis and feature extraction from the given dataset</p> <p><u>Current Work:</u> Working on the Attention Layer which is applied on word level and then on sentence level</p> <p><u>Future Work:</u> Building the HAN model and training it</p>	
1 st October, 2021	<p><u>Previous Work:</u> Building the Attention Mechanism Layer</p> <p><u>Current Work:</u> Combining the layers on word level, sentence level (TimeDistributed) and document level (Dense) in the HAN model</p> <p><u>Future Work:</u> Training the model and verifying the results for training, validation and test set</p>	

8 th October, 2021	<p><u>Previous Work:</u> Working with the parameters of HAN model and its performance</p> <p><u>Current Work:</u> Training the model through different number of epochs to avoid overfitting</p> <p><u>Future Work:</u> Review the model's performance and compare it with others</p>	
-------------------------------	---	--