MANOJ SARAVANAN

IIITDM Kancheepuram

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EXPERIENCE

Research Intern - IIIT Hyderabad

Machine learning based spoken language analysis

May 2022 – Dec 2022 Hyderabad,India

- Research and development of “Machine learning based spoken language analysis for prosodic representations” in collaboration with Spoken Language Forensics and Informatics (SLFI) group, IIIT Hyderabad.
- Worked on automatic mispronounced word detection and their exaggeration in teacher’s speech.
- Experience with performance analysis, optimizations and benchmark evaluations.

Samsung Prism Research Intern

Samsung R&D Institute India

Feb 2023 - Present Online

- Working on "Web tracking detection using ML classification model".
- Developing UI based/Web based/Plug in customizable tool for validating websites which are tracking user data from browser can be blocked.

ACHIEVEMENTS

- Achieved Best Global Ranks (below 200) in various contests for the competitive programming skills, organized by Codechef, Codeforces, Atcoder and Topcoder.
- Qualified for 2nd Round of Facebook Hacker Cup - 2021 (FBHC) in during 1st Year B.Tech.
- Qualified for Regional Maths Olympiad (RMO) at H.S.C.
- Qualified for Indian Junior Science Olympiad (INJSO) in S.S.C.

TECHNICAL SKILLS

- MATLAB, LaTEX, AutoCAD
- C,C++,Java, Python

PERSONAL SKILLS

- Having Leadership Qualities.
- Ability to work under pressure.
- Comfortable Working Independently.
- Ability to take initiative to solve problems.

HOBBIES

- I am an avid competitive programmer who likes to solve algorithmic puzzles. Currently, I am holding 5 star on Codechef and Expert on Codeforces.
- Listening to Music.
- Exploring Places.

EDUCATION

B.Tech. (CSE) - 8.49 CGPA

IIITDM Kancheepuram

Dec 2020 – Currently

Higher Secondary - 93%

Telangana State Board of Intermediate Education

2020

Secondary - 94%

Central Board of Secondary Education

2018

PROJECTS

Face Mask Detection

- Extracted face data for training. Trained the classifier to classify faces in mask or labels without a mask. Detect faces while testing data using SSD face detector. SSD is a Single Shot Multibox Detector. This is a technique used to detect objects in images using a single deep neural network. Using the trained classifier, classified the detected faces.

Language translation model using Machine learning

- Built a language translation model using NLP and PyTorch with an encoder-decoder architecture using LSTM networks. Trained the model on a parallel corpus and validated on a separate set. The model was used to translate new sentences by generating target tokens based on the fixed-size representation produced by the encoder. Demonstrates proficiency in NLP, deep learning, and PyTorch, and ability to build and train a machine learning model for natural language translation.

Movie recommender system

- It is a machine learning project that suggests movies to users based on their past viewing history and ratings. In this project, a collaborative filtering model is built using matrix factorization techniques like singular value decomposition (SVD) or alternating least squares (ALS). The model is trained on the user ratings data and generates personalized movie recommendations for each user. This project showcases expertise in natural language processing, data preprocessing, and machine learning algorithms.