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SUMMARY

I am a 3rd year Bachelor of Technology student at Delhi Technological University, New Delhi, India. I possess Machine Learning and Artificial Intelligence skills and their implementation in the field of research. I am also studying the course of Machine Learning and Computer Vision as a part of my curriculum. I have previously worked on various Machine Learning projects and publications. I have significant experience as an intern in two different research labs in India.

EDUCATION

Bachelor of Technology	2020-2024	Delhi Technological University, New Delhi, IN	9.16 (CGPA)
Senior Secondary Education	2020	Vishal Bharti Public School	91.8 %

EXPERIENCE

Researcher, Big Data and Web Analytics Lab, Delhi Technological University December 2020- Present

- Developed a novel architecture for identifying the type of malware using executable binary files using Machine Learning under the guidance of professor Dr. Rahul Katarya. The study is currently undergoing review at the Institute of Electrical and Electronics Engineers (IEEE) transactions on Network Science and Engineering.
- Completed a review study on intrusion detection using Artificial Intelligence algorithms, which was accepted and presented at the international conference on the Internet of Things (ICIOT-2022).
- Currently working on a research study to develop a novel model to detect the personalities of individuals from bilingual handwritten texts using Machine Learning techniques.
- Building an end-to-end novel fish species classification system using computer vision and machine learning.

Research Intern, Indian Institute of Technology, Dharwad May 2022- July 2022

- Trained a federated machine learning setup to optimize edge caching in 5G mobile networks using Machine Learning algorithms under the guidance of Dr. Bharath B N. .

ML/AI Intern, HearUS (https://hearus.me/) January 2022- March 2022

- Developed Machine Learning based algorithms from scratch to identify different emotions of patients from their chats which was further integrated with their chatbot.
- Technologies Used - Natural Language Processing, Machine Learning, Python.

PUBLICATIONS

Solar Panels Crack Detection using Overhead Images - *International Journal for Research in Applied Science and Engineering Technology (IJRASET)* | Digital Object Identifier - 10.22214/ijraset.2021.38532 October 2021

Developed a Machine Learning model to detect cracks on solar panels using overhead images. This can help in automating the process of detecting faults in specific panels and replacing them in time.

Convolutional Network-based Face Mask Detection - *World Journal of Advanced Research and Reviews (WJARR)* | Digital Object Identifier - 10.22214/10.30574/wjarr.2022.13.2.0142 April 2022

- To monitor public places during Covid-19, this paper proposes an ensemble-based convolutional neural network with an accuracy of 99.5%, which can be used to detect whether a person is wearing a face mask or not from their images. .

CONFERENCES ATTENDED

Third International Conference on Internet of Things (ICIoT-2022), *5 - 7 April 2022* | Certificate

- The review paper on detection of intrusion using the techniques of Machine Learning and Deep learning was accepted in the International Conference.
- The paper will further be indexed in the Communications in Computer and Information Science series of Springer Nature.

MANUSCRIPTS SUBMITTED

DIMC: DenseNet and InceptionV3 based Malware Classification - *IEEE Transactions on Network Science and Engineering* | UNDERGOING REVIEW August 2022

- The manuscript of the novel architecture for identifying 25 different categories of malware present in the MaleVis dataset is currently undergoing review in IEEE Transactions. The study aims to provide a better and faster model for classifying malware using executable binary images. .

Fake News Detection System Using Featured-Based Optimized MSVM Classification - *IEEE Access* | UNDERGOING REVIEW October 2022

- The manuscript proposing a fake news detection using different feature selection algorithms on ten famous datasets including Politifact, GossipCop, etc. is currently undergoing review at IEEE Access journal. The study aims to provide a better-automated system to detect fake news over social media.

ACADEMIC PROJECT

Brain Tumor Segmentation — *Machine Learning* | Github Link | Medium Link

- This project presents the implementation of two Deep Learning models (UNet and LinkNet) used for segmenting brain tumors using the images available in a dataset on Kaggle. These accurate automatic algorithms for segmenting brain tumors can improve disease diagnosis and treatment planning and enable large-scale pathology studies.
- Technologies Used - Computer Vision, Machine Learning

E-Commerce Product Recommendation System — *Machine Learning* | Github Link | Medium Link

- Using the titles of various fashion products, this project implements Natural Language Processing algorithms to recommend products to customers. This system can be used in e-commerce platforms to give customers the best recommendations on what they might be willing to buy.
- Technologies Used - Natural Language Processing, Deep Learning.

NATIONAL LEVEL ACHIEVEMENTS AND PARTICIPATION

- Finalist in Toycathon 2021 organized by All India Council of Technical Education(AICTE) and Ministry of Education. | Certificate
- Won the internal round and finalist at Smart India Hackathon-22 organized by All India Council of Technical Education | Certificate

TECHNICAL SKILLS

C, C++, Python	Machine Learning, Deep Learning	Git, Tensorflow, Keras, Linux, Unity