Thiruthangal Nadar College
Knowledge is Power

IQAC

ESN PUBLICATIONS

THIRUTHANGAL NADAR COLLEGE

(Belongs to the Chennaivazh Thiruthangal Hindu Nadar Uravinmurai Dharma Fund)
A Self Financing Co-Educational College of Arts & Science
Affiliated to the University of Madras
Re-accredited at 'B++' Grade by NAAC & An ISO 9001:2015 Certified Institution
Selavayal, Chennai, Tamil Nadu, India.

2nd National Conference on Emerging Trends in Computer Science & Technology

[NCETCST 2024]

Date : 30th AUGUST 2024

Organized by the
School of Computer Science
in Association with IQAC Jointly Organized ESN Publications.

INDEX

S.No	Paper Title & Authors	Page No
1	DBGN2: Deep Belief Generative Neural Network approach for Amazon Product Reviews Based Sentiment Analysis - **P.Anbumani , Dr.K.Selvaraj**	1
2	AI-powered chatbot's for social goods - **Moka Nanditha Varma, Mohammed Afnan**	1
3	Conversion of Text to Editable Digital Format using Convolution Neural Network **Ajmeera Kiran, Mr. P. Purushotham Ms. D. Divya Priya, I.Sapthami, Mr.B.Murali Krishna, Dr.M.Kalpana Chowdary**	2
4	Exploring Machine Learning Approaches for Heart Disease Prediction: A Survey **Elavarasi.C, Dr. M. Priya**	3
5	Advanced Deep Learning Techniques for Medical Image Segmentation **Miss. Vasumathi M Mr. Abdul Basith Z**	3
6	Blockchain And Ballots: Assessing the Impact of Decentralized Voting Technologies - **Dr.Revathi.S, Dr.Catherine Gracia Mary.A**	4
7	AI and the Metaverse: New Opportunities for Marketers - **N Narendra varman, S Divya**	4
8	Ethical Hacking in Mobile and IoT Devices - **A Mohammed Haroon, Saifulla N**	5
9	Feature Group-based VGG-16 Model for Rice Disease Prediction **B. Gohin,Suresh Chanamala, Aruna Samudrala,C.Thinkal Dayana**	5
10	Swarm intelligence for Efficient IOT device coordination and data processing - **Vijayalakshmi, S Divya, Jagan Raj D**	6
11	Threat Intelligence And Analytics In Cybersecurity - **Ramya S, Joshua M, S Divya**	6
12	A Rainfall Prediction using Machine Learning & Artificial Neural Network - **Dr. G. Najeeb Ahmed**	7
13	Advanced Cloud Computing And Gis For Automatic Surveillance And Monitoring System In Wildfire - **Ms. K. Vaishnavi , Dr. V. Sowmya**	7
14	An outline of Artificial Intelligence's Security Enhancements in MANET **A.Aravind ,Dr.A.Poongodi**	8
15	A Deep Learning Framework For Medical Imagineering Precision Liver Tumor Segmentation **V.Varalakshmi, Dr.U.Hemamalini**	8
16	A Comprehensive Analysis of Deep Learning and Machine Learning for Semantic Segmentation, Human Action Recognition, and Object Detection in Machine and Robotic Vision - **Mrs M. Girija, Dr. V. Divya**	9
17	ENHANCED SKIN DISEASE PREDICTION VIA SVM AND CNN **D. Ushanandini, Dr.T.Kamala kannan, Dr.S.Gopalakrishnan**	10
18	Machine Learning Based Personality Classification Using PCA Algorithm **S. Mohit, V. Kavinaya, Dr. M. Anoop**	10
19	Sustainable Computing for Climate Change Analysis: A Path Forward **Mr.P.Jayachandran, Dr.A.P.Praveen Kumar, Mr.T.Prem Kumar, Dr.P.T.Kasthuri Bai**	11
20	An Overview of Current Trends of Artificial Intelligence in Health Care **Dr. A. Ambeth Raja, J. Jebin, G.A. Raakesh**	11

Feature Group-based VGG-16 Model for Rice Disease Prediction

B. Gohin[1]
Associate Professor, Department. of MCA
Suresh Chanamala[2], Aruna Samudrala[3]
[2,3]Assistant Professor,
[1,2,3]Swarnandhra College of Engineering and Technology
(Autonomous),Seetharamapuram, Narasspur, West
Godavari, Andhra, India, gohin.b@gmail.com, chsureshscet@gmail.com,
,arunasam03@gmail.com
C.Thinkal Dayana,Assistant Professor,
Department. of MCA, Scott Christian College
(Autonous), Nagercoil, Tamil Nadu India.
Thinkaldayana@gmail.comtion

Abstract: Rice plant diseases can significantly impact crop yield, making accurate and early detection crucial. Current diagnostic methods are time-consuming, ineffective, and often require additional equipment. This study proposes a novel machine learning approach for automated rice disease detection using high-quality images of rice leaves. Our method utilizes a feature-clustering based VGG-16 model, pre-processed with Wiener filter and color enhancement techniques, and DBSCAN for feature grouping. Results show an accuracy of over 97% in detecting three common rice diseases - leaf smut, bacterial leaf blight, and brown spot - using 10-fold cross-validation. This automated system has the potential to revolutionize rice disease detection, enabling efficient and healthy crop production.

Keywords: Brown Spot Disorders, Density-Based Clustering, Leaf Smut, Leaf Blight.

Swarm intelligence for Efficient IOT device coordination and data processing

Vijayalakshmi[1], S Divya[3], Jagan Raj D[2]
Assistant Professor[1&3]
2nd BCA[2], Department of Computer science
RBANMS First Grade College, Bangalore

Abstract: The Internet of Things (IoT) has changed how devices interact with one another and communicate, producing a lot of data. However, device coordination and data processing are severely hampered by the sheer scale and complexity of IoT networks. Latency, energy consumption, and network congestion are all exacerbated by traditional centralized approaches' frequent inefficiency. A novel swarm intelligence framework for effective IoT device coordination and data processing is proposed in this paper. Our strategy makes use of distributed algorithms and bio-inspired methods to enable autonomous, adaptive, and decentralized device coordination. It is based on natural swarms. Swarm intelligence reduces latency and energy consumption by optimizing device communication, data aggregation, and processing. A novel multi-objective optimization model that takes into account device heterogeneity, data priority, and network dynamics is presented by us.

Keywords: AI Chatbot's, Social Good, Natural Language Processing (NLP), Machine Learning

 ISBN-978-81-971794-7-1