Virtual Conference
27-28 January 2022
# TABLE OF CONTENTS

## SESSION 1: TRACK 1A- AI & SOFT COMPUTING

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISTANCE MEASURES OF PYTHAGOREAN FUZZY SETS BASED ON SINE FUNCTION</strong></td>
<td>Mansi Bhatia, H D Arora, Anjali Naithani, Surbhi Gupta</td>
<td>1</td>
</tr>
<tr>
<td><strong>ASSESSMENT OF RELIABILITY FACTORS IN GLASS MANUFACTURING PLANT USING BOOLEAN ALGEBRA AND NEURAL NETWORK</strong></td>
<td>Surbhi Gupta, Shefali Kanwar, H. D. Arora, Anjali Naithani</td>
<td>8</td>
</tr>
<tr>
<td><strong>FUSION OF BAG OF VISUAL WORDS WITH NEURAL NETWORK FOR HUMAN ACTION RECOGNITION</strong></td>
<td>S. Anju Latha Nair, Rajesh Kannan Megalingam</td>
<td>14</td>
</tr>
<tr>
<td><strong>QUESTION-CENTRIC EVALUATION OF DESCRIPTIVE ANSWERS USING ATTENTION-BASED ARCHITECTURE</strong></td>
<td>Adithya S Oasis, Abishai Ebenezer M, Dhruv Sharma, Rithvik Sada, Arti Arya</td>
<td>20</td>
</tr>
<tr>
<td><strong>FACE MASK DETECTION USING CONVOLUTIONAL NEURAL NETWORK</strong></td>
<td>Vaibhav Ji Srivastava, Surbhi Vijh</td>
<td>26</td>
</tr>
<tr>
<td><strong>HIERARCHICAL CLASSIFICATION USING NEIGHBOURHOOD EXPLORATION FOR SPARSE TEXT TWEETS</strong></td>
<td>Kumar Mallikarjuna, Simanta Pasari, Kamlesh Tiwari</td>
<td>31</td>
</tr>
</tbody>
</table>

## SESSION 2: TRACK 2A- ALGORITHMS AND SOFTWARE

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REFERENCE FRAMEWORK “HOGO” FOR CYBERSECURITY IN SMES BASED ON ISO 27002 AND 27032</strong></td>
<td>Carlos F. Cruzado, Liset S. Rodriguez-Baca, Lizeth G. Huanca-Lopez, Erika I. Acuna-Salinas</td>
<td>35</td>
</tr>
<tr>
<td><strong>UNDERSTANDING REFACTORIZATION TACTICS AND THEIR EFFECT ON SOFTWARE QUALITY</strong></td>
<td>Mansi Agnihotri, Anuradha Chug</td>
<td>41</td>
</tr>
<tr>
<td><strong>NIRJAS: AN OPEN SOURCE FRAMEWORK FOR EXTRACTING METADATA FROM THE SOURCE CODE</strong></td>
<td>Ayush Bhardwaj, Sahil, Kaushlendra Pratap, Gaurav Mishra</td>
<td>47</td>
</tr>
<tr>
<td><strong>A LEARNING BASED INFLUENCE MAXIMIZATION ACROSS MULTIPLE SOCIAL NETWORKS</strong></td>
<td>Nida Shakeel, Rajendra Kumar Dwivedi</td>
<td>53</td>
</tr>
<tr>
<td><strong>RESEARCH ON THE APPRAISAL OF THE ATTRACTION OF TECHNOLOGICAL TALENTS IN THE SHUANGCHENG ECONOMIC CIRCLE OF CHENGDU-CHONGQING REGION</strong></td>
<td>Li Qin Hu, Asif Khan, Amit Yadav, Hong Liu</td>
<td>59</td>
</tr>
<tr>
<td><strong>IMPLEMENTING PRIORITIZED-BREADTH-FIRST-SEARCH FOR INSTAGRAM HASHTAG RECOMMENDATION</strong></td>
<td>Rishabh Bhaskar, Ankita Bansal</td>
<td>66</td>
</tr>
</tbody>
</table>
SESSION 3: TRACK 3A- BIG DATA AND DATA MINING

BIDIRECTIONAL ENCODER REPRESENTATION FROM TRANSFORMERS (BERT) VARIANTS FOR PROCEDURAL LONG-FORM ANSWER EXTRACTION ....................................................... 71

S Nitish, R. Darsini, G S Shashank, V Tejas, Arti Arya

PREDICTING POPULARITY OF YOUTUBE VIDEOS USING VIEWER ENGAGEMENT FEATURES .............................................................................................................................. 77

Harshitha Batta, Anjana V Murthy, S Savitri

SOFTWARE DEFECT DATA COLLECTION FRAMEWORK FOR GITHUB ................................................................. 82

Vikas Suhag, Sanjay Kumar Dubey, Bhupendra Kumar Sharma

HIERARCHICAL CLUSTERING ALGORITHM BASED ON FAST AND UNIFORM SEGMENTATION ......................................................................................................................... 88

Xiaojun Wu, Jingjing Wei, Sheng Yuan, Zihong Chen, Xiaochun Wang

PERFORMANCE SKEW PREDICTION IN HPCC SYSTEMS ..................................................................................... 94

Amba Karthik, Harsh Mishra, S Jayanth, G Shobha, Jyoti Shetty

MULTICLASS CLASSIFICATION FOR LARGE MEDICAL DATA USING ADAPTIVE RANDOM FOREST AND IMPROVED FEATURE SELECTION METHODS ........................................................................................................... 98

M. Sitha Ram, G. V. Suresh, Narasimha Swamy Biyappu

SESSION 4: TRACK 4A- CLOUD COMPUTING & VIRTUALIZATION

CLOUD-BASED MODEL FOR DETECTING SKIN CANCER .......................................................... 106

Keshav Shivkumar, Goutham Swaminathan, Teja Puvvadi, Arjun Shekar, S Shilpa

ELLiptic curve cryptograPhy in cloud security: a survey ................................................................. 112

Mohammad Anas, Raza Imam, Faisal Anwer

A COMPARATIVE STUDY OF TASK SCHEDULING METAHEURISTIC ALGORITHMS IN CLOUD COMPUTING .................................................................................. 118

Anant Kumar Jayswal, D. K. Lobiyal

A STUDY AND ANALYSIS OF DECENTRALIZED CLOUD BASED PLATFORM .................................................. 124

Sonali Sharma, Shilpi Sharma, Tanupriya Choudhury

SEMANTIC SIMILARITY BASED MEASUREMENT FOR LUNG’S INFECTION IMAGERY USING DEEP LEARNING ........................................................................................................... 129

Madhulika Bhatia, Saru Dhir, Poonam Tanwar, Amit Khan

ANALOGIZING THE POTENCY OF DEEP LEARNING MODELS FOR GLAUCOMA DETECTION ............................................................................................................................... 134

Yves Attry Kalin, Yash Bhardwaj, Subhash Arun Dwivedi, Arun Prakash Agrawal, Shravyam Risariya, Vivek Jha

SESSION 5: TRACK 5A- COMPUTER NETWORK & SENSORS

A SURVEY ON RESOURCE ALLOCATION SCHEMES IN DEVICE-TO-DEVICE COMMUNICATION ......................................................................................................................... 140

Sucheta Gupta, Rajan Patel, Rajesh Gupta, Sudeep Tanwar, Nimisha Patel
BFLEDGE: BLOCKCHAIN BASED FEDERATED EDGE LEARNING SCHEME IN V2X UNDERLYING 6G COMMUNICATIONS
Vishwa Amitkumar Patel, Pronaya Bhattacharya, Sudeep Tanwar, Nilesh Kumar Jadav, Rajesh Gupta

PERFORMANCE EVALUATION OF HSRP, GLBP AND VRRP WITH INTERIOR GATEWAY ROUTING PROTOCOL AND EXTERIOR GATEWAY ROUTING PROTOCOL
Aayush Agarwal, Shilpi Sharma

DV-HOP LOCALIZATION BASED ENERGY EFFICIENT ALGORITHM FOR WIRELESS SENSOR NETWORKS
Vivek Kanwar, Surekha Rani, Amandeep Kaur, Anil Behal, Debarati Nath, Neha Sharma

ROAD MONITORING AND SENSING SYSTEM USING MOBILE SENSORS
Prabhat Singh, Abhay Bansal, Ahmad E Kamal, Sunil Kumar

DESIGNING OF A NOVEL PCF BIOSENSOR HAVING OCTAGONAL CORE AND BASED ON SPR FOR CHEMICAL AND HEAVY METAL SENSING
Amit Kumar Shakya, Surinder Singh

KNOWME: A MODULE TO IMPROVE THE EFFICIENCY OF RESOURCE ALLOCATION IN DATA CENTER NETWORKS
Gholamreza Ramezan, Amr Abdelnasser, Yashar Ganjali

SESSION 6: TRACK 1B- AI & SOFT COMPUTING

PERFORMANCE ANALYSIS OF BOLLINGER BANDS AND LONG SHORT-TERM MEMORY(LSTM) MODELS BASED STRATEGIES ON NIFTY50 COMPANIES
Varun Seshu, Hritik Shanbhag, Samrudhi R Rao, Disha Venkatesh, Pooja Agarwal, Arti Arya

DESIGN AND IMPLEMENTATION OF FUZZY LOGIC-2DOF CONTROLLER FOR EMULATION OF WIND TURBINE SYSTEM
P. Manjeera, G. V. Nagesh Kumar, V. Rafi

WIND SPEED PREDICTION WITH SPATIO TEMPORAL CORRELATION USING CONVOLUTIONAL AND SPIKING NEURAL NETWORKS
Tanay Agrawal, Sarita Sheoran, Sumanta Pasari, Sakshi Shukla

RECURRENT CONVOLUTION BASED GRAPH NEURAL NETWORK FOR NODE CLASSIFICATION IN GRAPH STRUCTURE DATA
Lilapati Waikhom, Ripon Patgiri

A NOVEL DEEP LEARNING MODEL FOR ACCURATE PREDICTION OF IMAGE CAPTIONS IN FASHION INDUSTRY
Pulkit Dwivedi, Anushka Upadhyaya

IMPROVED COMPUTER VISION-BASED FRAMEWORK FOR ELECTRONIC TOLL COLLECTION
Mary Shaji Mathews, M Prabu, Arish Pitchai, Derin Ben Roberts, G Rahul

SESSION 7: TRACK 3B- BIG DATA & DATA MINING

ANALYZING OPINION OF DIFFERENT COUNTRIES FOR RECENT EVENTS IN AFGHANISTAN USING TEXT MINING
Sachin Aggarwal, Shoaib Showkat Khan, Misha Kakkar
DEDICATED FARM-HAYSTACK QUESTION ANSWERING SYSTEM FOR PREGNANT WOMEN AND NEONATES USING CORONA VIRUS LITERATURE ................................................................. 222
Revathi S Nambiar, Deepa Gupta

MINING INFLUENCE OF PEOPLE ON VIRAL MARKETING ................................................................. 228
Arushi Gulati, Natansha Sahgal, Neetu Narayan, Avneesh Atrey, Jitendra Singh Jadon

AN EMPIRICAL ANALYSIS OF CODE SMELLS USING CRITIC-TOPSIS METHOD ............................ 234
Stuti Tandon, Vijay Kumar, V. B. Singh

DEGREE OF ACCURACY IN CREDIT CARD FRAUD DETECTION USING LOCAL OUTLIER FACTOR AND ISOLATION FOREST ALGORITHM .................................................. 240
Kanishka Negi, Gaddam Prathik Kumar, Gaurav Raj, Subrata Sahana, Vishal Jain

COVID-19 VACCINATION CONCERNS AND ITS WAY OUT IN RUSTIC ZONES ............................... 246
Akbar Ghani, Asif Khan, Khushnood Abbas

SESSION 8: TRACK 8H-MACHINE LEARNING

RETINAL IMAGE SEGMENTATION BASED ON MACHINE LEARNING TECHNIQUES ............................. 252
Kaushiki Raj Srivastava, Nancy Girdhar

ANALYSIS OF BREAST CANCER USING MACHINE LEARNING METHODS ....................................... 258
Avneesh Atrey, Neetu Narayan, Surbhi Vijh, Sumit Kumar

PREDICTION OF ABNORMAL PREGNANCY IN PREGNANT WOMEN WITH ADVANCED MATERNAL AGE AND PREGESTATIONAL DIABETES USING MACHINE LEARNING MODELS ................................................................. 262
Aastha Singh, Madhulika Bhatia, Anchal Garg

PROTEIN-PROTEIN INTERACTION PREDICTION FROM PRIMARY SEQUENCES USING SUPERVISED MACHINE LEARNING ALGORITHM ................................................................. 268
Monika Khandelwal, Ranjeet Kumar Rout, Satyed Umer

SMS SPAM CLASSIFICATION USING MACHINE LEARNING TECHNIQUES ....................................... 273
Tarun Jain, Payal Garg, Namita Chalil, Aditya Sinha, Vivek Kumar Verma, Rishi Gupta

OPEN DOMAIN CONVERSATIONAL MODEL USING TRANSFER LEARNING ..................................... 280
Mukund K Roy, Garima Aggarwal, Abhay Bansal, Deeksha Juneja

SESSION 9: TRACK 6A- IMAGE/VIDEO PROCESSING

FAKE IMAGE DETECTION IN TWITTER USING FLOOD FILL ALGORITHM AND DEEP NEURAL NETWORKS ................................................................. 285
S Selva Birunda, P Nagaraj, S Krishna Narayanan, K Muthamil Sudar, V Muneeswaran, R Ramana

SUPERVISION OF VIDEO GAME CAR STEERING IMPLEMENTING HORCNN NETWORK ........................ 291
Clay Motupalli, R P Mohnith, Shivam Gaur, Vishesh Mittal, Surya Prakash

THE HWDI DATASET OF CAMERA CAPTURED WARPED HINDI TEXT DOCUMENT IMAGES .............. 295
Vibhanshu Singh Sindhu, Yash Sant, Ruchika Malhotra, Indu Sreedevi
ONTOMETRY BASED IMAGE RETRIEVAL BY UTILIZING MODEL ANNOTATIONS AND CONTENT ................................................................. 300
J Faritha Banu, P Muneeshwari, K Raja, S Suresh, T PLatchoumi, S Deepan

IMAGE STEGANOGRAPHY USING IMPROVED EXPLOITING MODIFICATION DIRECTION .......................................................... 306
Akansha Vishwakarma, M. P. Parsai

VISION 360: IMAGE CAPTION GENERATION USING ENCODER-DECODER MODEL.......................... 312
Ankita Kumari, Abhishek Chauhan, Abhishek Singhal

SESSION 10: TRACK 7A- IOT & AUTOMATION

BIOT (BLOCKCHAIN-BASED IOT) FRAMEWORK FOR DISASTER MANAGEMENT ...................... 318
Mandeep Kaur, Pankaj Deep Kaur, Sandeep K. Sood

CHANGING TRENDS OF BLOCKCHAIN IN IOT: BENEFITS AND CHALLENGES ...................... 324
Kirti Bala, Pankaj Deep Kaur

MACHINE LEARNING (ML) BASED HUMAN ACTIVITY RECOGNITION MODEL USING SMART SENSORS IN IOT ENVIRONMENT ................................................................. 330
Navita, Pooja Mittal

MODISH ENERGY DATUM USING LORA TECHNOLOGY ......................................................... 335
C. Shyamala Kumari, Rohit Kumar, Saurav Kumar Gupta, Shouryja Hazra, Mayurakshya Paul

SLEEPQUAL AND B.HEALTH: SMARTWATCH AND SMARTPHONE BASED BEHAVIORAL DATASETS OF YOUTH ................................................................. 340
Anshika Arora, Pinaki Chakraborty, M. P. S. Bhatia

AUTOMATION OF WATER DISTRIBUTION SYSTEM BY PREDICTION OF WATER CONSUMPTION AND LEAKAGE DETECTION USING MACHINE LEARNING AND IOT ............ 345
Sachin Aggarwal, Smriti Sehgal

SESSION 11: TRACK 1C- AI & SOFT COMPUTING

EXISTENCE OF THE YULE-SIMPSON EFFECT: AN EXPERIMENT WITH CONTINUOUS DATA ................................................................. 351
Rahul Sharma, Minakshi Kaushik, Sijo Arakkal Peious, Mahtab Shahin, Ankit. Vidyarthi,
Dirk. Draheim

A CONTEMPLATION ON MUSIC RECOMMENDATION SYSTEMS BASED ON EMOTION DETECTION ................................................................. 356
Yash Bhardwaj, Aayush Upadhyay, Harshvardhan Chauhan, Nihar Ranjan Roy

IMPROVING THE EFFICIENCY OF PLANT-LEAF DISEASE DETECTION USING CONVOLUTIONAL NEURAL NETWORK OPTIMIZER-ADAM ALGORITHM ................................................................. 362
Ajay Kumar, Vikram Bali, Shubhangi Pandey

CONTEXT-BASED QUESTION ANSWERING SYSTEM WITH SUGGESTED QUESTIONS ............. 368
Vijay Kumari, Srishti Keshari, Yashvardhan Sharma, Lavika Goel

ANALYSIS OF CUSTOMER SEGMENTATION CLUSTERING TECHNIQUES ................................................................. 374
Utsav Sharma, G Aditi, Nihar Ranjan Roy, Shailendra Narayan Singh
DETECTION OF CAMOUFLAGED DRONES USING COMPUTER VISION AND DEEP LEARNING TECHNIQUES ............................................................ 380
   Rishabh Tiwari, Ashwani Kumar Dubey

SESSION 12: TRACK 6B- IMAGE/VIDEO PROCESSING

SIGN LANGUAGE TO TEXT FOR DEAF AND DUMB ................................................................. 384
   Vibhu Gupta, Mansi Jain, Garima Aggarwal

ENHANCING THE SECURITY OF MEDICAL IMAGES IN TELEMEDICINE USING REGION-BASED CRYPTO-WATERMARKING APPROACH ................................................................. 390
   Usha Verma, Neelam Sharma

IMPLEMENTATION OF AUTOENCODER FOR SUPER RESOLUTION OF 3D MRI IMAGING USING CONVOLUTION NEURAL NETWORK ................................................................. 398
   Tina, Sanjay Kumar Dubey, Ashutosh Kumar Bhatt

REVIEW OF BRAIN TUMOR MRI IMAGE SEGMENTATION METHODS FOR BRATS CHALLENGE DATASET ................................................................................. 405
   Arindam Ghosh, Sanjeev Thakur

LUNG CANCER DETECTION USING ENSEMBLE OF MACHINE LEARNING MODELS ........ 411
   Basra Jehangir, Soumya Ranjan Nayak, Sourav Shandilya

PREDICTIVE ANALYSIS AND SUPERVISED DETECTION FOR FRAUDULENT CASES IN HEALTHCARE ......................................................................................... 416
   Ayush Bhardwaj, Sushant Kumar, Aishwarya Naidu

SESSION 13: TRACK 8A- MACHINE LEARNING

DEEP LEARNING BASED PREDICTION OF WEATHER USING HYBRID_STACKED BI-
   LONG SHORT TERM MEMORY ................................................................................................. 422
   Uma Sharma, Chilka Sharma

COVID-19 FAKE NEWS DETECTION SYSTEM ................................................................................. 428
   Ruchika Malhotra, Anushree Mahur, Achint

A TEMPORAL CONVOLUTIONAL NEURAL NETWORK BASED ACTIVITY RECOGNITION MODEL USING A REAL-TIME TWO-DIMENSIONAL SINGLE POSE ESTIMATION FRAMEWORK ......................................................................................... 434
   Devansh Srivastav, Akansha Bajpai, Abhishek Singhal

POISONING ATTACK DETECTION USING CLIENT HISTORICAL SIMILARITY IN NON-
   IID ENVIRONMENTS ................................................................................................................................. 439
   Xintong You, Zhengqi Liu, Xu Yang, Xuyang Ding

IDENTIFYING CRITICAL SUCCESS FACTOR FOR EFFECTIVE ADOPTION OF MOBILE LEARNING APPLICATION: AN EMPIRICAL STUDY IN INDIAN CONTEXT ................................................................. 448
   Manoj Wairiya, G. P. Sahu, Neeraj Tyagi

SPATIO-TEMPORAL DISTRIBUTION CHARACTERISTIC OF COVID-19 VACCINE USING TIME SERIES FORECASTING ......................................................................................... 454
   Raj Talan, Sonia Rathee, Rashmi Gandhi
SESSION 14: TRACK 1D- AI & SOFT COMPUTING

CLASSIFYING FAKE NEWS DETECTION USING SVM, NAIVE BAYES AND LSTM ........................................ 460
Parita Jain, Swati Sharma, Monica, Puneet Kumar Aggarwal

ESTIMATION OF PARTICULATE MATTER PM2.5 CONCENTRATION USING RANDOM FOREST REGRESSOR WITH HYPERPARAMETER TUNING ................................................................. 465
Deepak Gaur, Deepi Mehrotra, Karan Singh

AN APPROACH OF CATEGORIZATION AND SUMMARIZATION OF NEWS USING TOPIC MODELING ................................. 470
Uttara Behera, Sumita Gupta

GLCM BASED LGBM CLASSIFICATION FOR COVID-19 ANALYSIS USING CHEST X-RAY IMAGES ................................................................. 477
Basra Jehangir, Soumya Ranjan Nayak

SESSION 15: TRACK 8B- MACHINE LEARNING

A CONSTRUCTIVE APPROACH TO NUMERICAL MAPPING SCHEME OF NUCLEOTIDES FOR PREPROCESSING IN MACHINE LEARNING ................................................................. 482
C Saravanakumar, N Usha Bhanu

FAKE NEWS DETECTION: GA-TRANSFORMER AND IG-TRANSFORMER BASED APPROACH ................................................................. 487
Vivek Ranjan, Pragati Agrawal

SMART CROP RECOMMENDER SYSTEM-A MACHINE LEARNING APPROACH ................................................................. 494
Rakesh Kumarr Ray, Saneev Kumar Das, Sujata Chakravarty

COUNTERFEIT REGULATION THROUGH MACHINE LEARNING APPROACH AND DEPLOYMENT IN DOCKERS ................................................................. 500
Ajit Kumar Rout, Abhishek Shety, Koushik Modekurti

FEATURE SELECTION CONSIDERING CHARACTERISTICS OF OPERATING DATA AND RANDOM CUT TREES FOR HYDROELECTRIC GENERATOR FAULT DETECTION ................................................................. 508
Yuki Hara, Yoshikazu Fukuyama, Yuichi Shimasaki, Yuto Osada, Kenya Murakami, Tatsuya Ilzaka, Tetsuro Matsui

FAKE AND UNPROVEN MEDICAL REMEDY DETECTOR USING LSTM MODEL WITH TENSORFLOW FRAMEWORK ................................................................. 514
R. Sathya, Sayanti Roy, Jibendu Paul, Mopuru Sahithi Reddy

SESSION 16: TRACK 8C MACHINE LEARNING

DETECTION OF MALICIOUS CYBER FRAUD USING MACHINE LEARNING TECHNIQUES ................................................................. 520
Parv Rastogi, Eksha Singh, Vanshika Malik, Abhishek Gupta, Surbhi Vijn

TOWARDS A STOCK PRICE PREDICTION ON TIME SERIES DATA USING LONG-SHORT TERM MEMORY METHOD ................................................................. 525
Akshat Malik, Priyanshi Gupta, Surbhi Vijn
ANN-ANT-LION-MLP ENSEMBLE TRANSFER LEARNING BASED CLASSIFIER FOR DETECTION AND CLASSIFICATION OF ORAL DISEASE SEVERITY ........................................... 530
   Anurag Sinha, Md. Ramish, Sarita Kumari, Pooja Jha, Manish Kumar Tiwari

PREDICTION OF HEART DISEASE USING MACHINE LEARNING: STATE OF THE ART AND FUTURE DIRECTION ......................................................... 536
   Saloni Mittal, Nibhaya Kashyap, Rahul Kumar Verma

SESSION 17: TRACK 8D MACHINE LEARNING

FACE RECOGNITION BASED AUTOMATED RECOGNITION SYSTEM........................................ 543
   Abhisek Sethy, Ajit Kuma Raut, Soumya Ranjan Nayak

A COMPARATIVE STUDY ON MALARIA CELL DETECTION USING COMPUTER VISION........... 548
   Ayushi Shal, Richa Gupta

STROKE PREDICTION USING MACHINE LEARNING METHODS................................................ 553
   Saumya Gupta, Supriya Raheja

SENTIMENT ANALYSIS FOR ARABIC TWEETS ON COVID-19 USING COMPUTATIONAL TECHNIQUES ................................................................................. 559
   Surbhi Bhatia, Malak Alhaider, Maitha Alarjani

SESSION 18: TRACK 8G MACHINE LEARNING

INDIAN CURRENCY CLASSIFICATION USING DEEP LEARNING TECHNIQUES.......................... 567
   Rohit Swami, Smiti Khurana, Shubham Singh, Sanjeev Thakur, Pavan Kumar Reddy Sajjala

A NOVEL APPROACH OF OBJECT DETECTION USING DEEP LEARNING FOR ANIMAL SAFETY ..................................................................................... 573
   Rashmi Gandhi, Aakankshi Gupta, Ashok Kumar Yadav, Sonia Rathee

DEMOGRAPHIC CUSTOMER SEGMENTATION OF BANKING USERS BASED ON K-PROTOTYPE METHODOLOGY ................................................................. 578
   Rishi Gupta, Horesh Kumar, Tarun Jain, Anita Shrotriya, Aditya Sinha

DISEASE RISK LEVEL PREDICTION USING ENSEMBLE CLASSIFIERS: AN ALGORITHMIC ANALYSIS ........................................................................ 585
   Huma Parveen, Syed Wajahat Abbas Rizvi, Praveen Shukla

SESSION 19: TRACK 8E MACHINE LEARNING

DETECTION OF UNHEALTHY CITRUS LEAVES USING MACHINE LEARNING TECHNIQUE ......................................................................................... 591
   Nidhi Goyal, Sumit Kumar, Mukesh Saraswat

DIGITIZATION OF HANDWRITTEN TEXT USING DEEP LEARNING ........................................... 596
   Sumita Gupta, Aditya Gupta, Simran Khanna, Shivam Arora

COMPARATIVE ANALYSIS OF VARIOUS MACHINE LEARNING BASED TECHNIQUES FOR PREDICTING THE VIRALITY OF TWEETS .................................. 601
   Sakshi Kalra, Chitneedi Hemanth Sai Kumar, Yashvardhan Sharma, Gajendra Singh Chauhan
A QUANTITATIVE PERFORMANCE EVALUATION OF MACHINE LEARNING ALGORITHMS FOR ANALYSING SENTIMENTS OF EMOTICONS ................................................................. 606
   G Aditi, Utsav Sharma, Sumit Kumar, Jitendra Singh Jadon

RES2NET BASED TEXT INDEPENDENT SPEAKER RECOGNITION SYSTEM ........................................ 612
   Mukund K Roy, Ushaben Keshwala

TOWARDS OUTDOOR NAVIGATION SYSTEM FOR VISUALLY IMPAIRED PEOPLE USING YOLOV5 .................................................................................................... 617
   Swati Chandna, Abhishek Singhal

A NOVEL STOCK PRICE PREDICTION SCHEME FROM TWITTER DATA BY USING WEIGHTED SENTIMENT ANALYSIS .............................................................................. 623
   Nikhila Korivi, Katla Sai Naveen, Godavarthi Chandra Keerthi, V. M. Manikandan

TWITTER SENTIMENT ANALYSIS USING MACHINE LEARNING ..................................................... 629
   Abdullah Ikram, Mohit Kumar, Geetika Munjal

PREDICTING STUDENTS PERFORMANCE IN EXAMS USING MACHINE LEARNING TECHNIQUES ........................................................................................................... 635
   Khanyisile Sixhaxa, Ashwini Jadhav, Ritesh Ajoodha

SYMBOL ERROR RATE BASED APPROACH TO EXPLORE THE BEST LOCATION FOR CENTRAL NODE PLACEMENT IN ON-BODY WBAN ...................................................... 641
   Neha Arora, Sindhu Hak Gupta, Basant Kumar

SERVICE ORIENTED ARCHITECTURE(SOA): A LITERATURE REVIEW ON THE MAINTAINABILITY, APPROACHES AND DESIGN PROCESS ................................................. 647
   Leena Haorongbam, Renuka Nagpal, Rajni Sehgal

NEXT WORD PREDICTION USING DEEP LEARNING: A COMPARATIVE STUDY ................................. 653
   Milind Soam, Sanjeev Thakur

Author Index