



CHERAN COLLEGE OF ENGINEERING

K.Paramathi, Karur, Tamilnadu.

International Conference on Advances in Science, Engineering and Technology

ICASET - 2022

**27 & 28
MAY
2022**



Editors:

Dr. S.Kannadhasan

Prof. R.Bharathi

Dr. R.Baskaran

in association with



River Publishers

International Conference on Advances in Science, Engineering and Technology
[ICASET- 2022]

Virtual Mode

27-28 May 2022

Organized by

CHERAN COLLEGE OF ENGINEERING

[Approved by AICTE, Newdelhi and Affiliated to Anna University, Chennai,

Recognized by UGC with 2(f)]

K.PARAMATHI, KARUR-639111

www.cheran.ac.in

in Collaboration With

River Publishers

Description

Welcome to the International Conference on Advances in Science, Engineering and Technology [ICASET 2022] which will be organised in association with River Publisher on the 27th and 28th of May 2022 at Cheran College of Engineering in Karur, Tamil Nadu. Artificial neural networks, fuzzy logic, fuzzy neural networks, expert systems, genetic algorithms, and communication are some of the methodologies and techniques that are commonly used to build intelligent, automated, and secure systems. The main purpose of ICASET 2022 is to promote intelligent technologies such as fuzzy logic, neural networks, support vector machines, evolutionary computing, machine learning, and probabilistic reasoning for addressing real-time problems. At ICASET 2022, researchers, professors, students, and professionals in the domains of engineering and technology will have a world-class forum to showcase their work, expertise, innovative ideas, and discoveries. A fascinating technical programme will be on show. The programme will include research presentations, keynote lectures, invited talks, tutorials, panel discussions, and poster presentations. In all areas of soft computing, we're searching for innovative ideas. Submissions from academia, government, and industry are all welcome. Submissions for technical papers, workshop/special session ideas, and tutorial proposal submissions are now open. Its goal is to provide a great platform for professors, researchers, and scholars from all over the world to present the most recent innovative research results as well as the most recent developments and trends in the fields of Electrical, Electronics, Information, Computer, and Communication Technology. The goal of ICASET 2022 is to stimulate communication between scholars and practitioners working in a broad range of engineering and technology fields. A large number of people are expected to attend ICASET 2022 to present research findings,

discuss views and ideas, learn about new technologies, and extend their professional and social networks. ICASET 2022 will be held entirely online, with the authors presenting their papers. Original research papers (not under consideration for publication elsewhere) reporting novel theoretical and/or experimental research discoveries in the following tracks (but not limited to) are welcomed to be submitted in standard river publisher conference template by prospective authors.

Editor Details

Dr. S. Kannadhasan

Prof. R. Bharathi., B.E.,M.E.,[Ph.D]

Dr.R.Baskaran.,M.Tech,Ph.D

TABLE OF CONTENTS

1. Design of Protocol Based V2V Emergency DC Fast Charging

K.Sushita, Dr.N.Shanmugasundaram,Dr.T.Thandapani

2. Detection of Non-Technical Losses(NTL) in Electric Distribution Network by Applying Machine Learning

DIMF G P, Dr. P. Kumar

3. Covid Patient Data Analysis System Using SVM Algorithm in Machine Learning

Mrs Ramya S, Dhanalakshmi M, Sri Shakthi M R, Swathi J

4. An Improved Novel Lipschitz Optimization Algorithm with FBBIC Converter for Photovoltaic System Under Partial Shaded Condition

K Sivakkumar, R.Devarajan, S.Sathiskumar

5. Enhanced Energy Efficient Clustering Protocol – PSO

Vanshika Dangi, Sameer Nimse, Abhishek Singhal, Aayushi Ved

6. Prediction of Heavy Metal Content Present in Soil

Logeshwaran M, Maheshwaran M, Pradeesh Kumar P, Venkatesh V

7. People Counting and Tracking Using Machine Learning

Mr.K.Kalaiarasan,B.Rabinraj, S.Karuppusamy, K.S.Vetrivel

8. Soft C Using Multi Objective Meta heuristic Dragonfly Optimization For Cluster Head Selection In Wireless Sensor Networks

D.Viswanathan, Dr.S.RanjithaKumari, Dr.P.Navaneetham

9. Self-Appraisal Framework for Distance Estimation Monitors

Ms. ElankeerthanaR, Jeevadarshini G, RuthrapriyaS, Salini M, VidhyasreeM

10. Video Forgery Detection Using Features Extraction And Segmentation Techniques

Ramasamy V, Dinesh Kumar P, Sanjay P, Senthil Kumar S

11. Fuel Cell Based Vehicle

Dr.R.Aruna, B Saravanakumar, N Poiyazhisamy, K Poominathan

12. Hydrogen and Oxygen Production from Solar panel Using Electrolyzer

Dr.R.Aruna, RSaravanakumar, B Muthukumar, A Armstrong

13. Stock Market Close Price Forecasting Using LSTM And Candle Stick Charting

R.Sujatha, R.Ramesh, M.Ponraviraj ,K.Hariharan, B.Saran, M.Saravanakumar

14. Using Hand Gesture Cognizance and Voice Instruction for Human Computer Interaction

M Nithya, Eyuwankg S Swankg, M Kaviyarasan

15. Privacy Based Personalized Search Engine Using Greedy Algorithm

T.Benil ,B.Ananda Naarayanan, K.R.Naveen, R.S.Vijay,S.Thamari Chelvan

16. Critical Issues, Challenges in ERP Implementation and Proposed Solutions

Divya Asrani, Deepak Asrani

17. Virtualized Resource Allocation and Information Retrieval In Cloud Storage

Dr.K.Gurunathan,Logeshwaran.S,Tamil Selvan.E,Vijay.S,Yuvaraj.V

18. Time Series for Managing Food Waste Using Machine Learning

Kalaivani, Rajan C, Farjana Farvin S, Senthilkumar M, GeeithaS, Syed Musthafa A, A.Delphin Carolina Rani

19. Prediction of Cardiac Disease Using Machine Learning Algorithms

Neelu Kumari K.S.,Anushka D.V.,Kalaiarasi S., Umavathi.N

20. A Hybrid Model Combining Encryption Algorithms for Biometric DataHiding

H A Madhusudhana Rao, S Rajkumar, A Nithish Kumar, Dr R Karthik, Dr A Sunitha Nandhini

21. CLAMAC: Design of a Continuous Learning Aspect-Analysis Model for development of Multidomain Adaptive Chat Companions

Rajiv Khobragade, Pranay Deepak Saraf, Supriya Thakur

22. An Economical Deep Learning Framework for COVID-19 Diagnosis Using Lung Ultrasound Images

Anwar Basha H, Ravi Kumar Poluru, Shaik Thasleem Bhanu, K. Amuthabala, Keerthana P

23. Detection of Citrus Leaves and Fruit Diseases Using YOLO

Matheas T, Midhun Raaj S, Nageswaran A, Dr.P.Tamije Selvy

24. A Comparative Study on Earthquake Prediction using Machine Learning Algorithms

Kaladevi.A.C, Gayathri.M.L, Gopika.I, Iswarya.K

25. Deep Neural Network Based LSTM and Hybrid CNN

Pon Bharathi A, Dr. Veluchamy S , Srinivasan P, Nandhakumar A, Renswick S

26. Medical Drone a Life Saver In Emergency Situations

S Bhargavi, S Suresh Kumar , LMSS Samanvitha, T Niteesh Kumar , B Naveen Kumar

27. Interplay, Issues, and Challenges of Cloud and Fog Computing

Hiba Shakeel, Sushil Kumar Sharma

28. Context Aware Load Balancing Strategy for Batch of Tasks in Cloud and Fog Computing Environment

Hiba Shakeel, Sushil Kumar Sharma

29. A Hybrid Framework using Hierarchical Analysis for Classification of Mental Health Information

Infanta Jenifer R, Ramya R, Surya R

30. Sewage Block Detection System

Alaguvathana P, Subash R, Vineeth S, Ragul Kumar R

31. Analyzing Mental Health Between Various Professions Using Machine Learning And NLP Model

T. Abirami, G.K. Kamalam, T. Madhuvanthi, S. Akshita, Y. Annuncia Marena, and M. Haritha

32. Tracking And Monitoring System For Students In Elementary and Secondary Schools Using IoT

Kalaiyarasi M, Prasath P , Mathan A, Premnath R

33. Smart Online Voting System Using Facial Recognition Based On IoT and Image Processing

A.Aravindhana, M.Kalaiyarasi, S.Bharanikumar, P.Dhanapal, R.Dharmaraj

34. Analysis of Power in WSN Using Energy Harvesting Sources

Chaudhari Monali, Shiv Kaul, Siddhesh Kurhade, Kamlesh Madan, Suraj Sahu⁵

35. Simulation of Fuzzy Logic Controller for the Speed Control Of BLDC Motor

V.P.Yogitha, prof.K.Ramadas

36. Design and Analysis of Dual (Twin) Axis Solar Tracker System with the Improvement of Photovoltaic Efficiency

Venkatesh KumarS, Dr. Kathirvel C, Dr. Sebastian Vindro JudeP & Mohan Kumar R

37. A Survey on Enhancement of Energy Efficiency in Wireless Video Sensor Networks

Dr.C.Yaashuwanth , Ms.M.Sugacini, Mr.V.Ranjith, Ms.S.Aiswarya

38. AI Detection Social Media Users Depression Polarity Score And Diagnose Using Auto Creative Therapy

R.Bharathi ,R.K.Harish Gowtham², B.Deepa,D.Muthukumar,R.Nandhini ,T.Vanitha

39. AIRep: AI and IoT based Animal Recognition and Repelling System for Smart Farming

Harish Gowtham, R R.Bharathi, Divya T,Kamali M,Tamilvanan M,Vijayaragavan R

40. AI-Powered Smart Glasses for the Blind and Visually Impaired

M.Ananthi,R.Bharathi , M.Gayathri,G.Gokul,M.Sivakumar,B.Vaishnavi

41. Secure Sharing Military Information Using Image, Audio and Video With Steganography

M.Ananthi, R.Bharathi ,K. Karthika, N. Sasireka, S. Yogarni

42. GeoBox: Data Loss Prevention System using Location Defined Network

R.Stalinbabu, R.Bharathi, L.Kanimozhi,V.Kiruthika,K.Naveen,M.Sangeetha

43. SatChain: GEO Network Security Mechanism based on Blockchain and QKD Protocol

R.Bharathi,M.S.Maharahjan, K.Monika,M.Pavithra,C.Sivaraj,S.Thilipkumar

44. Smart Face Door Lock System using AI and Edge Computing

Karthik .M , Mithra .S, Menaka.A , Sanjana.M , Ruthrapriya. G

45. Energy Efficient Techniques In Multipath Routing Protocol Using Modified Genetic Algorithm

S.Kannadhasan, G.Ragul ,A.Sujith,RSujithkumar, R.Nagarajan

46. Ensembling Efficientnet's Algorithm Used For Low Light Enhancement With Raw Image

M.Karthik, B.Mohankumar,R.Revanth,S.Santhoshkannan

47. Fast Binary Multiplier Based On Counter, Compressor And Parallel Prefix Adder

M.Karthik,S.Prabhasri,S.Sathya, C.Jothika

48. Steganography Photograph Substitution Attack using Deep Fractal Network

S.Kannadhasan, G.Nandhini,N.Deepika,M.Sharmila

49. Design and Development of U-Shaped Antenna Structure for Wireless Communication

S.Kannadhasan, R.Sujitha, S.Kanagavalli, S.Praveena, Kanagaraj Venusamy

50. Wireless Charging of Electric Vehicle while Driving

R.Pari, R.Subramanirao, K.M.Gokul, P.Sri Haripriya, R.Siyamala

51. Solar Powered IOT based Smart Solid Waste Management System

R.Pari, R.Subramanirao, S.Visithra, R.Sagunthala, M.Anudharshiniya

52. FEA Analysis Of Connecting Rod Using Alloy Materials

R.Sabariselvan,S.K.Palanisamy,S.Balasubramani,A.Purushothaman,S.Sivaji

53. Comparison in Thermal Analysis Of Piston By Using Different Aluminum Alloy Materials

Mr.S.K.Palanisamy,S.Hariharan,R.Prabakaran,M.Sanjaikumar,S.Logeshwaran

54. Design And Analysis Of Four Stroke Engine Fins And Compared With Modified Design

S.K.Palanisamy, R.Baskaran, M.Sridhar, T.Suganthan, M.Vignesh, M.Vimal kumar

55. Design and Analysis Of Universal Joint

S.K.Palanisamy, R.Sabariselvan, V.Ananthi, S.Karthikeyan, S.Logesh, R.Mohanakrishnan

56. Design and Analysis Of Knuckle Joint By Using FEA Structural Analysis Method

R.Sabariselvan, T.Veeramahendraprasath, S.Vishnu, R.Tamilvanan, P.Jeyaprakash.

57. Design, Comparison and Analysis Of A Propeller Shaft Automobile Fatigue Life

Dr.R.Baskaran, R.Sabariselvan, S.Arivazhagan, K.Ramkumar, N.Sabarishkumar, S.Shanmugam

58. Structural Analysis Of IC Engine Piston

R.Sabariselvan, K.Ranjith, S.Chandru, U.Syedhusaiboorrahman.

59. GSM-Based Collision Detection And Prevention System For Automobiles

Nandhini P, Kalaiyarasi M, Karthikeyan S, Manoj P, Nirmalkumar G, Praveen C,

60. Dealz Smart - AI Deployment for Business System from a Sociotechnical Strategic Perspective

Sathesh Muppudathi E, Biji Rose, Aravindh M P, Saravana Sundaram K

61. Novel FCMA Method for Inrush Current Mitigation

Nehal.K.S, Ragavapriya.R.K ,Praveen kumar.D,Rahul.M and Niswan.K

62. A Hybrid Image Encryption Using Digital Image Fusion With Standard Encryption

Rajeshkumar S, Manjupreethi B, Narmadha Shri N, Ponselvi S

63. Design and Analysis of S Parameters for Tri-Band Band Pass Filter

Rajeshkumar S, Sneka S, Suganthi S, Subhashini K, Sangeetha P

64. FIR Filter Design Based On MCMA Module

Meenaakshi Sundhari R.P., Fathimasaffana A., Dharanya D., Bridget Maria Helen E

65. Dynamic Performance Improvement of AFZ Converter with Improved Voltage Stability

Dr.D.Hemanand, Mr.Varatharaju, Dr.S.Gomathi, Mr.R.Manivannan, Dr.C.Naresh,
Dr.S.Kannadhasan

66. Design of Reboost converter with Induction Motor Drive for Solar PV System

Ms.S.Sudha Merlin,S.Baskaran,Dr.M.Arthy, Dr.A.GnanaSagaya Raj, Mr.E.FantinIrudaya Raj⁵
Dr.S.Gomathi

67. Wireless Vehicle To Home (V2H) Technology

Ms. S.P. Vedavalli , S.Karthik

68. Assessment of Corrosion in Concrete Incorporating Treated Used Foundrysand

A.Sasikumar, S.Ajithkumar, K.Gururagav, R.Tamilsundar

69. Comparison of Various Ensemble Machine Learning Techniques to Recognize the Instantaneous Internet of Things Assault

P Kalyanasundaram, S.Markkandeyan, N Sengottaiyan , J.Vijayakumar , H.Senthil Kumar

70. An Efficient Image Watermarking Approach based on Modified DWT Method to Improve the Performance

S.Markkandeyan, N Sengottaiyan, J.Vijayakumar, H.Senthil Kumar, P. Kalyanasundaram

71. Augmented Domain for Hepatic Bruise During Image Based Robotic Liver Surgery

P. Nirmala , G. Ramya, G.Ramkumar, Anitha G, R.Thandaiah Prabu

72. A Novel Deep Learning Methodology for Identification of Stroke from MRI Brain Radiology Specification

G. Ramya, G.Ramkumar, Anitha G, R.Thandaiah Prabu, P. Nirmala

73. A comparative Study of Several Machine Learning Algorithms to Identify Fall Detection in Senior Citizens

G.R.Suresh, C.Senthilkumar, P. Shyamala Bharathi, V. Amudha, S. Jaanaa Rubavathy

74. Performance Analysis of Skin Cancer Detection Using GLCM and SVM

C.Senthilkumar, P. Shyamala Bharathi, V. Amudha, S. Jaanaa Rubavathy, G.R.Suresh

75. Impact of Personal Factors on Turnover among Seafarers

Aarthi Suresh, Krithika.M

76. On $\mathbb{K} - \mathbb{Q}$ –Bipolar Fuzzy BCI-Ideals

M. Premkumar, M. A. Rifayathali, A. Prasanna, A. Nagaraj, S. Ismail Mohideen

77. Maximum Viability for WSN with Energy Harvesting and Cooperation by Drift Penalty and Perturbation Method

S.Radhika, V.Mohanavel, D. Balakumaran, J.Harirajkumar,S.Diwakaran

78. DFNN: A Novel Deep Learning Neural Network and Traditional Edge Detection Filter for Retinal Blood Vessel Segmentation

M. Ravichandran, Shamitha.C, R.Sabitha, Anita Titus , AnvarShathik J

79. A Smart Machine Learning Architecture for Protecting IOT against DDOS Assaults

S.Diwakaran, M.Tamilselvi, S.Radhika, S. Scinthia Clarinda, Shamitha.C

80. IoT-Enabled Toxic Gas Leakage Detection using Wireless Sensor Network in Industrial Locations

M.Tamilselvi, R. Sabitha, Anita Titus, V.Mohanavel, M. Ravichandran

81. An Optimized Wireless Network Performance for Secure Data Transmission and Quality of Service

S.Venkatasubramanian, Chayan Paul, M.Ramya, O.Cyril Mathew , S.Radhika

82. Schemes for Secure Key Agreement and Authentication in Wireless Body Area Networks

J.Harirajkumar, R.Thandaiah Prabu, S.Diwakaran, Shamitha.C, Anitha G

83. Productive Energy Consumption for Cluster Selection in WSN using Modified LEACH-Based Routing Scheme

P.Prakash, V. Sujatha, J.Harirajkumar, A. Parimala, Anitha G

84. An intelligent Service Based System on Wireless Sensor Networks for supportable consignment Transportation

P.Suganthi, Esther C, G.Ramkumar, Chayan Paul, J.Harirajkumar

85. A Study on Segmentation Technology of Ultrasound Deep Network Segmentation Technique of Thyroid Nodules

Anita Titus, J.Harirajkumar, E.Dhiravidachelvi, R. Thandaiah Prabu G, G.Ramkumar

86. A Review on Performance of Concrete Using Metakaolin as A Binder and Granite Waste as A Coarse and Fine Aggregate

Gottipati Manidhar, D.Gopinath

87. Predicting the irradiation effect on solar power plants and optimum performance evaluation model using Machine learning

B Kalaiselvi, Dr. Karthik B, Dr.A.Kumaravel

88. Anaerobic Treatment of Food Waste for Energy Recovery – A Floating Drum Anaerobic Digester

Senthil Kumar S, Amol L Mangrulkar, Ramarao M, Seralathan S,Natarajan M.P

89. Performance Analysis on Smart Solar Grass Cutter with Lawn Coverage

Sathish S, Saravanan M, Johnson Samuel S, Ramarao M,Natarajan M.P

90. Smart Tracking Security Device For Women Safety Using Raspberry Pie Hardware

G.R. Jothi lakshmi, B. Vineeth Kumar, G. HemanthNagasai, D.Ravi

91. Bi-dimensional Empirical Mode Decomposition based Dimensionality Reduction of image using Interpolation and Smoothness Techniques

Anvar Shathik J, Veerabhadra Babu D

92. A Systematic Study of Deep Learning Algorithms in Oral Squamous Cell Carcinoma: Current State, Clinical Issues, and Potential Scenarios

Saraswathi.T, V.Murali Bhaskaran

93. Diagnosis Of Chronic Kidney Disease Using Deep Learning

Fathima S.K, Priyadharshini T, Poorna Chandra K, MahaSwetha S

94. A Nearly Diagnosis Of I Schemic Stroke Using Hybridized Machine Learning Algorithm

Fathima S K, Kavipriya M, Haripriya V, Gokul

95. Person Re-Identification Using K-Reciprocal Encoding

S.Shargunam, R.Mallika@pandeeswari , S. Sriram, Dr. R. Ravi , Dr. G. Rajakumar, Dr.S.Kannadhasan

96. Isolated Bidirectional Micro Inverter With Proportional Resonant Controller For Renewable Energy System

Rajesh and R.Madavan