

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: IQAC Room

Chair:**Dr.Dharun V S**,Professor Rajas Institute of Technology,Nagercoil

Session Title/Area:**Artificial Intelligence and Deep learning**

Faculty In Charge:**Prof.Shyma S**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: .Meghana S Biju, Fathima Roshini

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	17	Mitigating Class Imbalance through Multimodal Fusion in VGG19 for Cataract Detection
2	21	Analysis and Performance Evaluation of various Artificial Intelligence techniques for Disease Prediction
3	79	Early Detection of Chronic Kidney Disease: The Data Mining AI Fusion
4	80	CT Scans Reimagined: Early Intracranial Hemorrhage Detection with AI
5	81	Deep Learning and Paddy Leaf Detection: A Comprehensive Analysis
6	112	Beyond Vision: Unveiling The Potential of AI and IOT in Diabetic Retinopathy Diagnosis
7	119	Empowering Farmers with AI: Risk Mitigation Through Machine Learning in Smart Irrigation Systems
8	127	Gastric Cancer Unveiled: Navigating The Terrain Of Diagnosis And Therapy
9	178	Predict Solar Panel Power Production Using Weather Forecasts
10	212	JOURNEY CRAFT : Crafting a smart traveling experiance
11	229	Revolutionizing Software Defect Prediction Through Deep Learning
12	253	Real-Time Hand Sign Language Translation: Text And Speech Conversion
13	270	Detection and Classification of Sleep Apnea: Smart Health Solutions
14	275	Enhancing Farming Practices through a Comprehensive Recommendation System
15	283	Syncing Music With Emotions Using Computer Vision
16	312	A comparative analysis of using Deep Learning and Machine Learning technologies for intrusion detection for effective network traffic analysis.

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: EEE Seminar hall

Chair:**Dr.Shaji R S**,Professor,St.Xavier Catholic College of Engineering

Session Title/Area:**Artificial Intelligence and Machine learning**

Faculty In Charge:**Prof.RajalakshmiP**,Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter:Nakshathra B V, Ananya H

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	120	Assessment of Lead Contaminant in Ground Water using Image Processing and Machine Learning Algorithms
2	317	Eva: Python-based Desktop Virtual Assistant for Visually Impaired
3	325	Validating ML Algorithms For Efficient Breast Cancer Prediction Using K-Fold
4	328	A Comprehensive Review Analysis on Osteoarthritis Using Deep Learning and Machine Learning Technologies for Arthritis Detection
5	351	Event Management System Using Generative AI
6	353	Precise Lung Disease Classification Through Bagging Ensemble Method
7	365	Comparative Analysis of Early Warning System for Landslide Prediction and Mitigation
8	377	Transforming Education : The Impact Of ICT And Data Mining On Student Outcomes
9	399	Optimizing the strategic Fusion of IoT and AI for Enhanced HR Performance in stocks
10	400	AI-Powered Employee Performance Evaluation Systems in HR Management
11	407	Empowering IoT Devices with Energy-Efficient AI and Machine Learning
12	408	Emphasis Interaction Based Industry 5.0 Smart city Digital Twin's Technology
13	409	Modified Artificial Hummingbird Algorithm with Deep Learning for Pest Detection through Leveraging Pattern Recognition-based Fusion Approach
14	418	Machine Learning Approaches for Proactive Phishing Attack Detection
15	422	The Future Charged: Optimizing Electric Vehicle Performance through Advanced Power Management Strategies
16	469	Algorithmic Strategies for Cyber Crime Attack Prevention Harnessing the Power of Convolutional Neural Networks
17	470	A Deep Learning-Enabled Approach for Real-Time Monitoring of Learner Activities in Adaptive E-Learning Environments

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: Einstein Hall

Chair:**Dr. M. Antony Joans Kumar**,Assistant Professor,St.Xavier Catholic College of Engineering

Session Title/Area:**Artificial Intelligence and Machine learning**

Faculty In Charge:**Prof.Giji Sonia**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: Adithya Anilkumar, Manna Susan Abraham

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	471	Zero-Day Threat Detection A Machine Learning Paradigm for Intrusion Prevention
2	473	Advances in Early Detection and Monitoring of Retinopathy in Preterm Infants using CNN and MLP Models
3	474	A Hybrid Approach for Vehicle Detection and Counting Using Machine Learning Algorithms
4	477	Leveraging Machine Learning algorithms for Fake Profile Detection on Instagram
5	522	In-Depth Investigation of Artificial Intelligence - Blockchain Integration Strategies for Security Enhancement
6	545	Detection of Polycystic Ovary Syndrome Using Clinical Data and Ultrasound Images
7	587	Cross-Platform Multimodal Frogeye Leaf Spot Recognition and Classification: Advancing with Cutting-Edge CNN Technologies and Transfer Learning in Diverse Plant Species
8	613	SoulEase : AI Enhanced Personal Journal - Text Based Emotion Detection
9	614	Augmented-High Resolution Network for Image Segmentation
10	626	Analysis Of Urinary Tract Infections Using Machine Learning Based Prediction And Classification
11	690	Novel Healthcare Cybersecurity System with Optimized Adversarial Attack Defenses in Deep Learning Models using GPU and Parallel Processing Technologies
12	712	Exploring the Efficacy of Various Machine Learning Approaches for Gold Price Forecasting: Insights and Analysis
13	715	AI-Powered Climate Change Adaptation and Mitigation
14	719	Intelligent Chatbot For Educational Institutions
15	730	Career Compass : Navigate your Career journey with confidence
16	747	Anemia Estimation Using Eye Conjunctiva Image: A Comparative Study Of Deep Learning Algorithms

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: Civil Seminar Hall

Chair:**Prof.Anil J**, Assistant Professor,Mar Basелиos College of Engineering and Technology,Thiruvananthapuram

Session Title/Area:**Soft Computing**

Faculty In Charge:**Prof.Anjali Nair**,Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: Bibitha Mariam Santhosh, Devika S

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	785	A Frame Work For The Tuberculosis Detection Through CXR Using Deep Learning Networks
2	792	Smart Wearable Devices for Prediction Using Machine Learning Techniques: Depth Exploration
3	798	Skillify : Enhanced Learning Management System Using Generative AI
4	832	Cloud-Based Storage Solutions for Facial Recognition Attendance Systems
5	838	Harnessing Predictive Modelling for Early Diagnosis of Glaucoma
6	894	Utilizing Spectrograms and Deep Learning Techniques for Improved Music Genre Classification
7	904	Machine Learning Approaches for Load Forecasting and Time Series Analysis
8	918	Automated Depressive Disorder Classification using Optimized CNN-LSTM
9	927	A Machine Learning Approach for Predicting Physical Activity Intensity from Wearable Sensor Data
10	968	Addressing K-NN Limitations Through Boosted Multi-Algorithm Nearest Neighbour Ensembles
11	971	AI-Driven Financial Management Optimizing Investment Portfolios through Machine Learning
12	1085	A Novel Approach for Credit Card Fraud Detection Using Deep Learning Algorithms
13	1122	Improving Road Maintenance and Safety through Weighted Ensemble of Deep Convolutional Neural Networks: Focus on Pothole Detection
14	1124	Advancing Human Action Recognition: A Hybrid Approach Employing Autoencoder and Transfer Learning Techniques
15	1127	Effective Lung Cancer Detection Framework Employing Adaptive Histogram Equalization and Deep CNN

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: Mechanical Seminal Hall

Chair:**Dr. Joseph Zacharias**,Professor,College of Engineering Trivandrum

Session Title/Area: **Computing**

Faculty In Charge:**Prof.Shehna Salim**,Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rappoter: Asiya N, ShibinaShabu

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	8	FIFA dataset Analysis and Match prediction
2	86	Empowering Women's Mental Health: A Critical Examination Of Depression Detection
3	128	Health Assistance System for Brain Disease Detection using ML
4	232	BookGenius: Elevating Reading Exploration through Full-Stack Mastery
5	235	HarvestHub: Mobile Agricultural Markets
6	439	Unified Precision Farming: Advancing Crop Yield Prediction Using WSN and Edge Technology
7	550	Precise Trap Handler for a Pipelined 32-Bit Processor for Space Applications
8	569	Developing an Interactive MATLAB-Based Application for AI-Enhanced Defect Detection in Steel Images
9	558	Fairness in CPU Scheduling: A Probabilistic Algorithm
10	659	Enhancing Cloud Security in DDoS: A Holistic Approach Leveraging Machine Learning Techniques
11	670	Identification of Missing Gate Faults in Reversible Circuits by a Unity Method
12	735	VLSI Implementation of an Efficient 2D Median Finding Algorithm for Non Linear Image Filtering
13	884	Voice based navigation assistance for the blind
14	1037	Multiagent Reinforcement Learning for Efficient Cyber Attack Detection on the Internet of Medical Things using tSNE- ZOA based Dimensionality Reduction
15	1049	LDA-OOBO Based Dimensionality Reduction and Classification Using Hybrid BiGRU-MLP for Web Based Cyber-Attack Prediction in Industrial System
16	1166	An Efficient Approach for EEG Seizure Detection using CNN with Feature Extraction

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: CSE Lab I

Chair:**Dr. Vasanth Kishore Babu**, Associate Professor, Chaitanya Bharathi Institute of Technology

Session Title/Area: **Block chain technology and Computer security**

Faculty In Charge:**Prof. Ajmal Sha S**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: Arsha V Sasidharan, Arya S

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	31	Blockchain-Enabled Decentralized Trust Management and Secure Voting system
2	32	Envisaging the patterns in Blockchain
3	36	Quantum Machine Learning Of Bigdata Set Using Randomized Measurements
4	40	IoT Device Attacks, Security and Certification
5	327	Secure Social Healthcare System Over Cloud
6	329	Smart Fetes Monitoring System Using Healthcare Iot For Pregnant Women
7	367	MEDICUS
8	446	Exam Invigilation Scheduler
9	527	Indoor Navigation System using WiFi RSSI
10	582	Cluster-based risk analysis for big data security framework
11	667	Secure Data Deduplication for Efficient Cloud Storage Using Blockchain Technology
12	751	A Review on the Analysis of the Effectiveness of Permission Based Security Models in Android Apps
13	837	Experience Replay: A value-based deep reinforcement approach for Malicious URL Detection in the Tor Browser
14	972	Data-Driven Decisions: Integrating Machine Learning into Human Resource and Financial Management
15	1062	VLSI Secure communication: Advancements in Blowfish Algorithm for Secure Data Transmission
16	1131	A Pragmatic Enquiry to Learn Recent Trends in Insider Threat Detection Approaches

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: CSE Lab II

Chair:**Dr.Manu J Pillai**,Associate Professor,TKM College of Engineering Kollam

Session Title/Area:**Image Processing**

Faculty In Charge:**Prof.Harikrishnan R**, Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: Anupriya J, Josna J John

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	153	OCR-Based Extraction of Expiry Dates and Batch Numbers in Medicine Packaging for Error-Free Data Entry
2	413	Deepfake Classification For Human Faces Using Custom Cnn
3	452	Aquarium Control System using Yolov5
4	505	Real-Time Terrain Aware Drive Mode Suggestor using Deep Learning
5	538	Unifying Segmentation and Classification in Skin Disease Diagnosis: U-Net & CNN Hybrid Approach
6	539	STONEURO: STONE DETECTION UNVEILED THROUGH ADVANCED AI MODELS
7	570	Advancements in Image Denoising: A Deep Boosting Network Approach with Optimized Architecture and Regularization
8	672	Beyond the Pixels: Detecting Originality and Assessing Product Conditions using Digital Image Processing Techniques
9	692	Implementation of Deep Learning Based Super-Resolution Paradigms for Medical Imaging: A Study
10	724	Land Surface Temperature Dynamics and Flood Mapping Insights across Andhra Pradesh using Google Earth Engine.
11	731	Real-Time Periocular Based Face Recognition System
12	742	Enhancing Plant Leaf Disease Detection: Integrating Mobilenet With Local Binary Pattern And Visualizing Insights With Grad-Cam
13	748	Vacant Parking Slot Availability Detection Using Yolov8 and openCV - Integration with payment functionalities
14	821	Deep Learning-Based Flood Detection System Using Semantic Segmentation
15	831	Real-Time American Sign Language Gesture Recognition Using Transfer Learning
16	1090	A Comprehensive Analysis of Feature Extraction Techniques for Human Activity Recognition using Deep Learning

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: CSE Seminar Hall

Chair:**Dr.Menaka.D**,Associate Professor, Noorul Islam Centre for Higher Education, Kanyakumari

Dr. K. S. Angel Viji, Associate Professor College Of Engineering Perumon

Session Title/Area:**Optimization Techniques and Neural Networks**

Faculty In Charge:**Prof.Deepthy S**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: Meenakshy M S, Vaishnavi S

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	47	Design and Analysis of 4x4 bit various Multiplier Using Look-up table and implementation in FIR Filter
2	48	Enhancing Quantum Operations: Random Forests for Anomaly Detection and Alert Generation
3	52	Analysis Of 8X8 Bit Various Multiplier Using Look-Up Table And Implementation In Fir Filter
4	82	Revolutionizing Esophageal Cancer Diagnosis: Vgg-16 Deep Learning Approach
5	91	Watermarking Three-Dimensional Noc Architecture To Detect Malicious Intellectual Property
6	124	Deep Reinforcement Learning Approach for Smart Traffic Signal Control System
7	165	Flood Detection on Adverse Natural Conditions using CatBoost algorithm
8	309	Student Dropout Analysis For School Education
9	348	Optimized NLP Model with Caching, Parallel Processing and Streamlined I/O
10	540	Improving Transient Stability in Integrated AC-DC Power Systems with SVC through Transmission Line Reactance Optimization
11	567	Zomato ETL For Chain Of Orders Using Random Forest Algorithm
12	598	Enhancing Athletic Performance: 2D Human Pose Estimation Using Deep Neural Networks for Movement Analysis
13	697	Empowering Liver Disease Diagnosis with Convolutional Neural Networks
14	723	SDN-Enabled Networks: A Deeper Learning-Based Echo State Neural Network For Cyber Threat Detection
15	739	Modelling Of Fusion Artificial Neural Networks For Assessment Of Air Pollution In Smart City Environment
16	778	INTERFERENCE DETECTION IN IoT ENVIRONMENT

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: MBA Class I

Chair:**Dr.MuthukumarParamasivan**,Professor,Saveetha Institute of Medical and Technical Sciences

Session Title/Area:**Electric vehicles and Power electronics**

Faculty In Charge:**Prof.Anu Varghese**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: Anamika P Anil, Athina Mathew

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	78	Efficiency Reinvented: A Pioneering MPPT Algorithm For Unprecedented Solar Power Efficiency
2	126	Design and Implementation of PLL Controlled Bidirectional V2G and G2V Topology
3	612	IGBT based Solid-state PETC for HVDC Transformer
4	888	HRES based Battery System with Optimal ANFIS-MPPT for Microgrid applications
5	890	Solar Based Smart EV Charging Station With Smart Battery Management System
6	933	Edge Computing and IoT-Driven Renewable Energy Integration for Decentralized Smart Grid Optimization
7	970	Effective Utilization of Existing Solar System
8	1064	V2G-Enabled Electric School Buses for Grid Support and Peak Load Management
9	1091	Smart Solar PV Charge Controller System For Off Grid Applications
10	1109	Future of Energy Storage: Advancements in Lithium-Ion Batteries and Hybrid Vehicle Technologies
11	754	Securing Signal Integrity: Innovative Approaches to EMI Reduction in Converter Systems
12	824	Implementation Of Optimized Controller For PV Fed High Gain Converter For Off-Grid Applications
13	885	Active Synchronous Rectifier based Parallel Interleaved Converter for EV Battery Charging
14	923	Enhanced PV Grid-Connected System with Adaptive MPPT and Harmonic Mitigation Capability using High Gain Interleaved Cuk Converter
15	887	Innovative Grid Tied EV Charging using Hybrid Energy Source with Vehicle to Grid and Grid to Vehicle Operation
16	941	A Detailed Analysis of Cloud Storage and Key Management Techniques in IoT Driven Smart Grids

Technical Session - ICCPCT 2024

Day – 08/08/2024

Time:2.00 pm-4.00 pm

Venue: MBA Class II

Chair:**Dr.P.Jenopaul**, Professor, Adi Shankara Institute of Engineering and Technology,Ernakulam

Session Title/Area:**Biomedical Applications and Robotics**

Faculty In Charge:**Prof.Preethi**, Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: Priya Ann Maria,Sangeeth Santhosh

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	122	Efficient Harvest to Storage: Advancing with Automated Grain Systems
2	182	Advancing Endoscopic Precision: Focal Modulation-guided CNNs for Targeted Diagnosis of GI Anomalies.
3	201	ExprementalTribological Investigation On EN39B In Aerospace Application
4	384	Implementation of an Optimized AXI Using Verilog
5	518	Tongue Driven Electric Wheelchair based on Magnetic Hall Effect Sensor
6	650	Solar-Powered Unit with Novel Reversible Inversion for Sustainable Electrocoagulation
7	655	CARDIOBLINK - A Secure Web-Based Platform for ECG Analysis and Cardiac Disease Detection
8	716	Powerline fault detection and location tracking with GSM
9	773	Wifind - A Wi-Fi based Indoor Positioning System
10	789	SI-LERT (Assistive Device For Hearing Impaired Drivers)
11	803	Enhanced Breast Cancer Diagnosis: Leveraging Customized Transfer Learning with Machine Learning and Attention Mechanisms for Histopathology Image Classification
12	807	Identification of Epileptic Seizures using Recurrent Neural Networks and Time Series Transformer
13	861	Design and Development of Sensor Data Handling Controller for Modern Robotics
14	862	Autonomous Navigation Through G mapping-Based SLAM: A Comprehensive Evaluation
15	864	Accurate Gaze Estimation: An Innovative Eye Movement Prediction Architecture
16	1032	Development of an IoT-Enabled Smart Drainage and Health Monitoring System for Enhancing Safety and Efficiency of Manual Scavengers

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: IQAC Room

Chair:**Dr.Siva Balan R V**,Associate Professor, Christ University, Bangalore

Session Title/Area:**Artificial Intelligence and its Applications**

Faculty In Charge:**Prof.Shyma S**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter:Meghana S Biju, Fathima Roshini

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	25	ChatGPT: Unraveling User Challenges & Proposing Targeted Improvements
2	54	Enhancing Human-Computer Interaction with a Low-Cost Air Mouse and Sign Language Recognition System
3	55	Speed Control for Connected Autonomous Vehicles(CAV) on freeways
4	57	Artificial Intelligence based Sugarcane Leaf Disease Prediction System for Smart Farming
5	63	Assessment and Evaluation of Music Genre Classification by employing various AI Techniques
6	64	Implementation of various AI techniques for Autism Spectrum Disorder Detection
7	74	Artificial Intelligence, Cyber Security and Vedic Scripture Approaches for Sustainable Consumption in Global Food Legislature Perspective
8	142	AI Based Phishing Discrement For Immense E - Mail Data
9	156	Optimization Of Agriculture Using Data Science And Machine Learning
10	157	Classification and Prediction of Stroke Disease Using Machine Learning Algorithms
11	164	An IoT-Enabled Crop Recommendation System Utilizing MQTT for Efficient Data Transmission to AI/ML Models
12	205	Enhancing AI Proctoring System Using Various MI Models
13	207	Alzheimer’s Disease Prediction Using Machine Learning
14	209	Utilizing Proxy Re-Encryption for Enhanced Security in Data Sharing based on Blockchain
15	211	Scrap Craft AI Hub: Where Innovation Meets Creativity
16	236	Unlocking Consumer Insights: Advanced Sentiment Analysis for Product Evaluation
17	247	The Impact of Federated Learning on IoT Security: An Empirical Analysis
18	248	Innovative Waste Management: The Efficiency of IoT-Enabled Smart Bins

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: EEE Seminar Hall

Chair:**Dr.Divya S.V**,Professor, V.S.B College of Engineering Technical Campus

Session Title/Area:**Artificial Intelligence based Computing**

Faculty In Charge:**Prof.RajalakshmiP**,Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: Nakshathra B V, Ananya H

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	249	Optimizing Water Resources: An IoT Smart Management System Analysis
2	250	Beyond the Table: A Federated Learning CNN's Framework for Classifying Serve Shots in Table Tennis
3	263	National Language Processing For Sentiment Analysis in Social Media- A Comprehensive Review
4	307	Image Processing Based Proposed System For Malnutrition Using Deep Learning
5	368	Multiclass Brain Tumor Detection using EfficientNet B3 Model with Magnetic Resonance Imaging
6	391	Multi-class Waste Segregation using EfficientNetb3 Model through Waste Segregation Dataset
7	401	Artificial Intelligence Integrated Rice Crop Disease Detection Using Drones for Smart Farming
8	402	Artificial Narrow Intelligence Inspired Neuromorphic Computing for Logic Operations in Healthcare Appliances
9	410	Enhancing Speech Recognition for Hearing-Impaired Individuals Using Deep Learning Models
10	417	Optimizing Web-based Inventory Management system using QR code Technology
11	421	Detection of Fraudulent Activities in Unified Payments Interface using Machine Learning - LSTM Networks
12	461	Probing Aberrant Heart Rhythms Utilizing CNN Autoencoders for Enhanced ECG Anomaly Recognition
13	462	A Symphony of Sentiments using Log-Melspectrogram Techniques for Emotional Classification
14	463	New Era in Fracture Diagnosis using Deep Learning's Role in Precision Prediction
15	464	Towards Sustainable Seas Utilizing VGG19 Empowered Coral Health Evaluation
16	478	Performance Enhancement of Machine Learning Algorithms for Predicting Stroke
17	514	Enhanced approach to detect disease in the Respiratory System
18	552	Strategic Deployment of Deep Learning Algorithms to Mitigate Fraud in Online Finance

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue:Einstein Hall

Chair:**Dr. Mudita**, Assistant Professor, Chitkara University, Punjab

Session Title/Area:**Soft computing application in prediction and detection**

Faculty In Charge:**Prof.Giji Sonia**, Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: AdithyaAnilkumar, Manna Susan Abraham

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	287	Harnessing Machine Learning for Precise Rainfall Forecasting: A Comparative Study
2	553	Listening to the Environment: Applying Deep Learning Techniques for Robust Environmental Sound Classification
3	554	Enhancing Cyber security with Machine Learning: Evaluating the Efficacy of Isolation Forests and Autoencoders in Anomaly Detection
4	555	Matrix Factorization vs. Deep Learning Auto encoders: A Performance Analysis in E-commerce Personalization
5	556	Comparative Performance of Random Forest versus Gradient Boosting Machines in Detecting Financial Fraud
6	568	Smart Milk Grading System for Quality Assessment and Adulteration Detection using IoT
7	611	IoT Activity Symphony: Harmonizing DBSCAN Clustering and t-SNE Visualization for Enhanced Recognition.
8	653	Music Recommendation and Generation Based on Face Emotion Detection
9	749	Systematic Review of Emerging Deep Learning approaches for Crop Diseases detection
10	760	A Scientometric Review of Machine Learning and Deep Learning Techniques
11	779	A Comparative Study of Machine Learning Algorithms for Weather Prediction in India
12	784	A Study on Integrating Machine Learning Techniques for Waste Management
13	808	Comparative Analysis of Deep Learning And Machine Learning Analysis For Kidney Tumor Analysis
14	818	Comparative analysis of deep fake detection methods using machine learning and deep learning
15	825	Early Prediction of Obesity Risk in Older Adults using XGBoost Classifier
16	860	A Human Activity Determination Predicting Abnormality Using SVM Approach for Mining Field Workers
17	896	Deep Learning for Automated Face Mask Detection: Enhancing Public Health Measures

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: Civil Seminar Hall

Chair:**Dr.R.Kingsy Grace**,Associate Professor,Sri Ramakrishna Engineering College, Coimbatore

Session Title/Area:**Image Processing**

Faculty In Charge:**Prof.AnjaliNair**,Assistant Professor, Baseliros Mathews II College of Engineering Kollam

Rapporter: Bibitha Mariam Santhosh, Devika S

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	43	Smart Farming Based Early Classification of Paddy Blast Disease Using Adaptive Deep Learning Algorithm
2	45	Mobile Marker-Based AR Children App for Learning Map
3	105	Recognition System: Detection of License Plate
4	129	Advancing the Unveiled Target Detection Using Masked Non-Harmonic Point Process Analysis Technique
5	134	Advancements in Glaucoma Detection: Deep Learning Analysis of Retinal Microvasculature for Early Diagnosis
6	135	Multiclass Breast Cancer prediction from Mammogram using CNN
7	155	Lung Tumor Detection Using Deep Convolutional Neural Network
8	199	Implementation of Tongue Based Myeloid Sarcoma Detection using Novel Cat Swarm Optimization and Compare with Particle Swarm Optimization Algorithm
9	213	An Effective Approach in Brain Tumor Detection and Classification Using CRF
10	313	Human behavioural identification in different aspects using neural network
11	369	YogaPose Vision: MobileNetV3-Powered CNN for Yoga Pose Identification
12	370	From Bean to Bar: Using CNNs for Automated White and Black Chocolate Variety Classification
13	454	Segmentation And Classification Of Brain Tumor Using CNN Algorithm
14	480	Cataracts disease detection using convolutional neural network
15	594	Vision Transformer Based Vision Enhancement for Visually Impaired Individuals
16	744	Smart Waste Management: VGG16-Based Classification System for Organic and Recyclable Materials
17	901	Enhanced Reversible Data Hiding Scheme Based on DCT Coefficients in JPEG Compression
18	939	Revolutionizing Potato Crop Health Using Advanced Image Analysis with Efficient Classification Algorithm

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: CSE Lab I

Chair:**Dr.Jayalekshmi M B**, Associate Professor, Noorul Islam Centre for Higher Education

Session Title/Area:**Block chain technology and Computer security**

Faculty In Charge:**Prof.AjmalSha S**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rappoter: Arsha V Sasidharan,Arya S

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	41	Ensuring Safety Drive through a Smart Helmet design using IOT
2	44	Cyber Attack Prevention Method for Enhanced Privacy of Patients Digital Healthcare Data in Smart Hospitals
3	130	Harnessing the Power of Block chain to Create a Decentralized E-Voting Infrastructure for Modern Democracies
4	161	Stalwart: An Advanced Mobile Application with Beggar Detection, Rehabilitation, Job Apply, Report Authority, Counseling, and Beggar Assistance
5	221	Ensemble Machine Learning Models for Accurate Prediction of Acute Pancreatitis Risk
6	225	RSA-Based Anonymous Certificate for Security Credential Management System
7	226	Hybrid Scheme of Post-Quantum Cryptography and Elliptic-Curve Cryptography for Certificates – A Case Study of Security Credential Management System in Vehicle-to-Everything Communications
8	295	Detection of Counterfeit Products with QR Codes using Blockchain Technology
9	615	Multi-Objective Dijkstra Algorithm for Enhancing QoS in SDN through Balanced Routing
10	666	Wireless Wealth: Capitalizing on the 5G Technology Frontier
11	687	Federated Learning Models for Intrusion Detection in Industrial IoT Networks
12	706	Multichain Blockchain Solutions for Ensuring Trust and Transparency in IoT Healthcare Environment
13	745	Machine Learning Applications in Azure for Enhanced E-commerce Customer Sentiment Analysis
14	809	Application Monitoring and Telemetry Analytics
15	813	Real-time Threat Monitoring: Utilizing IoT Data for Intrusion Detection in Smart Environments
16	1175	Literature Survey on Face Recognition of Occluded Faces

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: CSE Lab II

Chair:**Dr. Jeyasheela Y**, Associate Professor, Noorul Islam Centre for Higher Education

Session Title/Area:**Artificial Neural Networks**

Faculty In Charge:**Prof. Harikrishnan R**, Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: Anupriya J, Josna J John

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	110	Efficiency And Reliability Enhancement in HVDC-VSC Power Transmission Network with Control And Planning Strategies
2	132	Hybrid Logic Style CMOS Full Adder Using 10-T XOR & XNOR Circuit
3	137	Detection of Fake Hotel Reviews Using ANFIS and Natural Language Processing Techniques
4	218	A Classification based approach for early stage Prediction and Multi-dimensional analysis of Alzheimer's Disease
5	256	Effective Cognitive State Monitoring Using FBNN Architecture
6	294	High Speed Neural Network MPPT Algorithm For DFIG Based Wind Energy Conversion System
7	483	Drown Net: Infant Drowning Alert System using Deep Learning
8	506	Deep Convolutional Q-Learning system and VGG-16 steganalysis detector for image Steganography
9	525	Advanced Weather Monitoring and Disaster Mitigation System with Interactive Weather Visualizations, Flood Zone Detection, Unplanned Drainage Identification, and Emergency Shelter Mapping including Optional Drought Intensity Prediction Capabilities
10	608	Enhanced Channel Estimation using Artificial Neural Networks in MIMO Systems
11	634	PSO Optimized RBFNN Classifier For Lung Cancer Identification System
12	643	Intelligent Machine Learning Modelling for Soil Analysis and pH Prediction
13	705	Multiport DC to AC Inverter with Intelligent Controller Integration for PV-Based Grid Systems
14	720	Spot Light: A Disaster Safety Assistance Mobile Application with Disaster Alert, Rescue Center Search, Relief Apply, and Seeking Help Features
15	802	Hand Gesture Recognition for Patient Monitoring in the Medical Field: A Deep Convolution Neural Networks Approach
16	924	Enhanced Classification of Gravitational Wave Images using Convolutional Neural Networks
17	944	Refining Image Quality: Deep Neural Network Applications in Plane Wave Medical Imaging

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: CSE Seminar Hall

Chair:**Dr.Asha.P**, Associate Professor,Sathyabama Institute of Science & Technology

Session Title/Area:**Optimization techniques and Soft Computing Applications**

Faculty In Charge:**Prof.Deepthy S**, Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: Meenakshy M S, Vaishnavi S

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	217	Campus-Nest: Synergizing Student Sojourns Through Seamlessly Streamlined Accommodation Aggregation
2	227	Exploring the Optimized Hyperparameter Values Based on Mathematical Models for PSO
3	228	The Optimization of Hyperparameter Based on Mathematics for Gradient Descent Algorithm
4	316	Swolemate: A Fitness Assistance Smartphone Application with Gym Search, Workout, Meal Plan, Physical, and Mental Status Checking Feature
5	420	Innovative Roadguard: Yolov8-Powered Road Damage Detection
6	444	Divergent Approaches to Antimicrobial Peptide Classification: A Comparative Evaluation of AI Techniques
7	488	Impact of Machine Learning on Applying the Best Worst Method for Social Sustainability in Manufacturing Supply Chains
8	489	Accelerating Sustainability through Leveraging Machine Learning to Analyze CSR Spending in the Indian Automobile Industry
9	529	Towards a Greener Future: Harnessing Green Computing to Reduce ICT Carbon Emissions
10	546	IoT-Based Smart Gauntlet to Assist Physically Challenged and Fragile Mortals
11	562	Design of CMOS Based Lc-Voltage Control Oscillator Using Substrate Bias Effect and Low-Voltage Folded-Cascade Current Mirror Circuit
12	729	Prototype of Coal Mines Safety Monitoring And Alerting System Using IoT
13	743	Chaotic Particle Swarm Optimization Based Shortest Path Routing in VANET
14	746	An Efficient Shortest Path Optimized Algorithm For Vehicle Adhoc Networks System
15	777	Medicare: A telemedicine healthcare website
16	780	Velocity control of Voice Coil Actuator using Field Programmable Gate Array

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: MBA Class I

Chair:**Dr. Valentina Stephan**, Associate Professor, Saveetha Institute of Medical and Technical Sciences

Session Title/Area:**Electrical vehicle and Renewable energy**

Faculty In Charge:**Prof. Anu Varghese**, Assistant Professor, Baselios Mathews II College of Engineering Kollam

Rapporter: Anamika P Anil, Athina Mathew

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	114	An In-Depth Review of High-Performance DC-DC Converters for Electric Vehicle Charging Infrastructures
2	176	Design & Simulation of Fuel cell/Battery Hybrid Energy Storage System
3	252	Smart Staircase Lift for Assisting Elderly People
4	375	Analyzing Dual-Stage Inverter Performance for Solar Grid Integration
5	580	IoT Interfaced Improved Smart P&O MPPT Assisted PV-Wind Based Smart Grid Monitoring System
6	591	FOPID Controlled Indirect Matrix Converter for Wind Energy Conversion System
7	631	Performance evaluation of Vertical Axis Wind Turbine (VAWT) for variable load and wind flow directions
8	679	Advanced ANN-Controlled System with Hybrid Energy Sources Enabling Vehicle-to-Grid and Grid-to-Vehicle Operations
9	701	Intelligent MPPT Controller for PV with Energy Storage System Fed UPQC System for Power Quality Improvement
10	702	Integrated Renewable Energy System with ANN-Based MPPT for Efficient Power Generation, Wireless Transmission, and Energy Storage in EV Applications
11	703	Intelligent MPPT Controller for PV Fed Grid-Tied EV Charging with Power Quality Improvement using Neural Network Controller
12	783	AI-Improved Battery-Powered Automobile Battery Diagnostics
13	816	Optimizing Solar PV Systems: Balancing Cost and Efficiency for Sustainable Energy Deployment
14	874	Simulation of Battery Driven Electric Vehicle with Regenerative Braking
15	969	Exploring Efficiency: Comparative Study of Microcontroller Energy Consumption and Performance Optimization Strategies

Technical Session - ICCPCT 2024

Day – 09/08/2024

Time: 10.30 am-1.00 pm

Venue: MBA Class II

Chair:**Dr.Ashwini A**,Assistant Professor, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology

Session Title/Area:**Power systems and Communication**

Faculty In Charge:**Prof.Preethi**, Assistant Professor, Basелиos Mathews II College of Engineering Kollam

Rapporter: Priya Ann Maria, Sangeeth Santhosh

<i>Sl. No</i>	<i>Paper Id</i>	<i>Title</i>
1	46	Advanced Development On Real Time Monitoring Of Bridges Using Wireless Fidelity
2	136	Design and Implementation of a LoRa-Based Remote Health Monitoring System with Emergency Alert Capabilities
3	261	Hybrid Adhoc Routing Protocol Implementation in Mobile Adhoc Network Using Firefly Algorithm
4	285	Z Source Integrated Sepic Converter With Fuzzy Control For Grid Connected PV System
5	293	ANFIS MPPT Assisted PV Fed DC-DC Switched Z Source Converter For Microgrid Applications
6	339	Deep Learning PNN Based Fault Monitoring System for Three Phase Industrial Drive System
7	355	Mixing and Filling Operations using PLC , SCADA and IOT
8	428	Innovative Hybrid Renewable Energy System for Stable Active Distribution Network Operation
9	564	Optimizing and Improving Unified Power Quality Conditioner (UPQC) for Mitigation of Voltage Drop
10	577	DDSRF Theory for Power Quality in UPFC Applications
11	593	ANN based Harmonic Extraction in DFIG Fed DSTATCOM System
12	604	Integration of IoT-enabled UAVs in Smart Agriculture: Types, Applications, Trends, challenges
13	607	RIS and UAV Aided Spatial Modulation for 6G Telecommunication Systems
14	684	Smart Energy Management Integrating WECS with Intelligent Control Technique for Grid and HVDC Technologies
15	750	Efficient Power Extraction in Off-Grid Photovoltaic Systems with Landsman Converter: An Adaptive Fuzzy Control Approach
16	836	Ternary SRAM Cell Designs for Next-Generation: A Comprehensive Investigation of 6T, 8T, and 10T Designs
17	947	Recent developments in MIMO antenna architectures and their future directions