



SIDDHARTHA ACADEMY OF HIGHER EDUCATION
(Deemed to be University)

RESEARCH CONCLAVE 2026

Schedule for Online Presentations

23rd January 2026



Research Conclave
SIDDHARTHA ACADEMY OF HIGHER EDUCATION
JANUARY 2026

SESSION-1 : VLSI, Embedded Systems, IoT & Hardware Design

23rd January 2026 - Paper Presentations

Mode : OFFLINE -IN PERSON

Time : 11.00am - 1.30pm

Venue : EC351 Conference Hall



Chair: Dr. Deepak Kumar Panda

Co-chair: Dr. Phani Kumar

S.No	Paper ID	Title
1	RC26002	Performance Analysis of 5:2 Compressor-Driven Approximate Multipliers for Image Processing
2	RC26026	Design and Implementation of Drug Dosage Dispenser Using Microchip PolarFire SoC
3	RC26030	Arduino based Rain Water Harvesting System for Fulfillment of Water Supply-demand Imbalances
4	RC26032	Enhanced Monitoring and Management of a Solar-Powered Thermoelectric Cold Storage System
5	RC26054	Design and Implementation of AQUASOLAR: An Arduino-based Floating Solar Panel with IoT Monitoring and LDR-Driven Sun Tracking
6	RC26068	Assistive Home Automation System for Elderly and Physically Challenged Users Using Bluetooth and Arduino
7	RC26073	Design of Efficient Multiplier using Hybrid Accurate-Inaccurate 4:2 Compressor
8	RC26083	Design of a Slot-Engineered Compact Wideband Self-Isolated Multiple Input Multiple Output Antenna for 5G Millimeter-Wave Applications
9	RC26084	Smart Signals: An IoT-Based Traffic Violation Detection and Dynamic Signaling System
10	RC26089	Differential Logic Neural Networks For Efficient FPGA Implementation
11	RC26135	FPGA-accelerated vehicle number plate detection using YOLOV3 on PYNQ-Z2
12	RC26136	Design and implementation of CMOS Bandgap Voltage Reference in gpdk180nm

13	RC26176	Arduino based Intelligent Vehicle Event Recorder for Real-Time Accident Detection
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SESSION-2 : Artificial Intelligence, Machine Learning, Deep Learning

23rd January 2026 - Paper Presentations



Mode : OFFLINE –IN PERSON

Time : 11.00am - 1.30pm

Venue IT : IT Class room 250

Chair : Dr. K. LOVA RAJU

Co-Chair : Dr.T.Anuradha

S.No	Paper ID	Title
1	RC26004	Fusion-Based Multi-Model 2D Object Detection In Autonomous Vehicles
2	RC26006	Multimodal AI Web Platform: Integrating Text-to-Image and Text-to-Speech Generation with Real-Time Interaction
3	RC26031	Sleep Apnea Diagnosis System Using Machine Learning And Internet Of Things
4	RC26039	Squeezenet Performance Appraisal On Laryngeal Cancer Screening Using Various Convolutions
5	RC26046	Modeling Long-Range Context for Scientific Text Summarization Using Transformer Architectures
6	RC26051	Cotton Wool Spots Detection and Analysis of Retinal Images with EfficientNetB4 Deep Learning Model.
7	RC26063	A Multi-Agent Prompt Optimized Approach for Code Generation and Bug Detection with Large Language Models
8	RC26067	Deep Learning based Elderly Fall Detection System
9	RC26071	ASL Gesture Recognition with Feature Extraction using ML Algorithms
10	RC26075	A Confidence-Adaptive Ensemble Framework for Diabetic Retinopathy Detection Using EfficientNet-B5 and DenseNet-121
11	RC26076	Explainable AI-Based Analysis and Interpretation of Blood Test Reports
12	RC26091	Dual-Branch Explainable Deep Learning Framework for Early-Stage Melanoma Detection Using Gradient-Weighted Class Activation Mapping
13	RC26103	An AI-Driven Software Defect Prediction Framework Using Boosting Models with Cross-Project Validation for Agile–DevOps Environments
14	RC26127	An Explainable Multi-Omics ML Framework for Gastric Cancer Diagnosis and Prognosis

SESSION-3 : Image Processing, Computer Vision and Multimedia

23rd January 2026 - Paper Presentations

Mode : **OFFLINE –IN PERSON**

Time : **11.00 - 1.30pm**



Venue IT : **CSE Conference Hall**

Chair : **Dr. J. HARIKIRAN**

Co-Chair : **Dr . K. SRINIVAS**

S.No	Paper ID	Title
1	RC26005	Four-Decade Geospatial Assessment of Land Cover Dynamics and Climate Variability in Andhra Pradesh (1994-2024) Using Machine and Deep Learning Approaches
2	RC26055	Optical and SAR-Based Biomass Estimation at the District Scale: A Comparative Assessment
3	RC26061	Artificial Intelligence based Resume Evaluation and Parsing System
4	RC26069	Smart Segmentation 2.0 (Extended with Voice -Mood Detection)
5	RC26077	Epidemiological Analysis and Forecasting of Climate-Sensitive Diseases Using Area-Specific Web Application
6	RC26097	Derma Detect ML Based Skin Condition Analysis
7	RC26106	Phishing URL Pattern Clustering Using Unsupervised Machine Learning
8	RC26107	Vision-Based Classification and Spatiotemporal Tracking of Non-Biodegradable Debris on Water Surfaces.
9	RC26108	Supervised Machine Learning Models for Electricity Demand Forecasting: A Dataset-Driven Analysis
10	RC26112	Contactless WBC, RBC, HEMOGLOBIN: A Step Towards Smart Blood Analysis
11	RC26123	LandSlide Segmentation Using Deep Learning Models
12	RC26128	Visual-to-Text Translation via Lip Movement Analysis in Silent Videos
13	RC26149	Numerical Simulation of Plane Poiseuille Flow Using the Finite Volume Method Implemented in Python
14	RC26148	EEG-Based Pilot Readiness Assessment Using Machine Learning for Aviation Safety

SESSION-4 : Communication Systems, Signal Processing & Networks

23rd January 2026 - Paper Presentations

Mode : **OFFLINE –IN PERSON**

Time : 2.30pm - 5.30pm



Venue : EC351 Conference Hall

Chair: Dr. Deepak Kumar Panda

Co-chair: Dr. Phani Kumar

S.No	Paper ID	Title
1	RC26080	TV White Space , Cognitive Radio ,Spectrum Sensing , Deep Learning , Rural Wi-Fi
2	RC26096	Prediction of Performance Metrics for Rectangular and Circular Microstrip Patch Antennas Using Supervised Machine Learning
3	RC26105	Advanced Dual-Axis Solar Tracking System for improved Performance of a Solar cell
4	RC26115	Carbon Nanotube Chemiresistive Sensor for Propanol Detection towards Breast Cancer Screening
5	RC26116	Dual-Band Triangular Patch Antenna using Circular Ring Slot
6	RC26118	Non-invasive Lipid Profile Monitoring Using NIR Sensor and Machine Learning
7	RC26119	Non-invasive Lipid Profile Monitoring Using NIR Sensor and Machine Learning
8	RC26146	Joint Energy and Reliability Optimization in Hybrid Optical Acoustic Underwater IoT Networks
9	RC26155	A Machine Learning Approach for Multiclass Prediction of Obesity Levels
10	RC26157	Design and Development of a Custom UAV with Wireless Integration
11	RC26158	Soft Decision Combining Techniques For The Cooperative Spectrum Sensing
12	RC26161	Guardian Flow: Real-Time BiLSTM Threat Detection and Automated Incident Response with Linux Firewall Enforcement
13	RC26165	Intelligent Environmental Surveillance: Deep Learning-Based Illegal Dumpsite Detection Using Satellite Imagery and Geospatial Analytics
14	RC26182	Privacy-Preserving MBDAaaS Framework for Smart Grid Insider Threat Detection

SESSION-5 : Power Systems, Energy, Environment & Sustainability

23rd January 2026 - Paper Presentations

Mode : **OFFLINE –IN PERSON**

Time : 02.30pm - 5.30pm



Venue IT : IT Class room 250

Chair : Dr. K. LOVA RAJU

Co-Chair : Dr.T.Anuradha

S.No	Paper ID	Title
1	RC26009	Integrating GIS Visualization and Predictive Analytics for Intelligent Tourism Planning in Krishna District
2	RC26027	Controlling the Propagation Dynamics of HIV/AIDS with Optimal and Cost Effective Strategies
3	RC26056	Epileptic Seizure Prediction Using GSR Sensor and Temperature Sensor
4	RC26078	CORTANIUM: A Modular, Offline-centric Voice Assistant for Smarter Desktop Productivity
5	RC26081	CO2 Emission Rating of Vehicles Using Machine Learning
6	RC26085	Smart Stick for Visually Impaired with GNSS Feedback
7	RC26109	A Feasibility Study Of Crop Disease Classification Using Synthetic Hyperspectral Features
8	RC26139	A Multi-Objective Reinforcement Learning Framework for Enhancing Reliability and Resilience in High-Renewable Penetration Power Systems
9	RC26142	Impact of Digital Transformation on Operational Efficiency of Banks: A Conceptual Analysis
10	RC26152	HR Outsourcing Practices in Andhra Pradesh Manufacturing Firms
11	RC26171	A Systematic Bibliometric Analysis on Quantum Computing: Applications and Research Trends
12	RC26174	Reclaim: Digital Platform For Personalized Addiction Recovery And Behavioural Health
13	RC26184	An AI Powered Voice Assistant for Inclusive Education Among Visually Impaired Students

SESSION-6 : Social Sciences, NLP, Education, Quantum & Emerging Technologies

23rd January 2026 - Paper Presentations



Mode : OFFLINE –IN PERSON

Time : 02.30pm - 5.30pm

Venue IT : CSE Conference Hall

Chair : Dr. J. HARIKIRAN

Co-Chair : Dr . K. SRINIVAS

S.No	Paper ID	Title
1	RC26049	Evolution of Problem-Solving Skills in Indian Culture: From Ancient Knowledge Systems to the Modern Scientific Era
2	RC26074	RuralGuide AI: An AI-Based Multilingual Career Counseling Chatbot for Rural Students
3	RC26086	SahayataAI - A Multilingual AI Chatbot for Government Scheme Access
4	RC26114	Experimental And Theoretical Analysis Of Reacting Ethylene Vortex Rings
5	RC26126	Design and Implementation of a Unified Booking and Transit Optimization System for Railway and Metro Networks
6	RC26133	Enhancing Arithmetic Unit Efficiency With Hub And Posit Number System
7	RC26137	Computational Discourse Analysis: A Study on NLP application in Chitra Banerjee Divakaruni's The Mistress of Spices
8	RC26143	Leveraging Ethical Artificial Intelligence for Sustainable Policy and Research Education
9	RC26147	NeuroPass Behavioural Authentication System Using Siamese–TCN
10	RC26150	LLM-Driven Health Chatbot for Symptom-Based Disease Identification
11	RC26151	Exploring Land-Use Shifts in a Wetland Ecosystem Using Multispectral Remote Sensing Data and Google Earth Engine
12	RC26166	Outcome Based Education-Modern Teaching Strategies
13	RC26172	QUANTUM CANVAS: Scalable Quantum-Assisted Texture Generation Using PQC-Conditioned GANs
14	RC26179	Comparative Evaluation of Machine Learning Models for Diabetes Prognosis