



National Kaohsiung University of Science and Technology  
Department of Electronic Engineering  
**Research Institute of IoT Cybersecurity**

**International Postdoctoral Program 2027**

Ref: RIITC-Postdoc-2027-A01

Name: Dr. Pritee Ambarish Parwekar

Topic: Energy-efficient and intelligent UAV path planning for data collection in sparse wireless sensor networks

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-A02

Name: Dr. Divya Sharma

Topic: Design and optimization of perovskite solar cells using interfacial engineering for performance enhancement

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Dr. Balwinder Raj

Ref: RIITC-Postdoc-2027-A03

Name: Dr. Sudhanshu Maurya

Topic: Federated learning-based intrusion detection systems for edge networks

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-A04

Name: Dr. A. Mummoorthy

Topic: Predicting leaf-disease in intercropping system using hyperspectral imaging and hybrid deep learning

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-A05

Name: Dr. Balamurugan Balusamy

Topic: Integrating quantum and high-performance computing for sustainable quantum AIOT

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-A06

Name: Dr. Sandeep Gupta

Topic: Satellite-based crop yield prediction using multi-temporal remote sensing and AI techniques

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-A07

Name: Dr. Shamik Tiwari

Topic: Modeling cross-modal dependencies for multimodal IoT intrusion detection

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-A08

Name: Dr. Abhishek Kumar Jain

Topic: Designing an agentic AI-driven offensive security framework for IoT ecosystems with compliance-aligned risk governance

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-B01

Name: Dr. Pattem Sampath Kumar

Topic: Edge-intelligent IoT-based wireless sensor node architecture using machine learning for congestion control and energy efficiency

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-B02

Name: Dr. Pradeep Mullangi

Topic: Machine learning-based secure medical image processing in IoT-enabled healthcare systems

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-B03

Name: Dr. Abhishek

Topic: A unified multi-modal deep learning framework for semantic media forensics: Detecting AI-generated manipulation across visual, document, and news domains

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Vishal Jain

Ref: RIITC-Postdoc-2027-B04

Name: Dr. Ajay Kumar

Topic: Explainable AI for multi-source earth observation data fusion and analytics

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Vishal Jain

Ref: RIITC-Postdoc-2027-B05

Name: Dr. Roshan Anant Gangurde

Topic: HalluRAG-M: A framework for cross-modal consistency verification and hallucination mitigation in high-stakes generative systems

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Vishal Jain

Ref: RIITC-Postdoc-2027-B06

Name: Dr. Umang Garg

Topic: Graph neural network-based IoT botnet detection using traffic behavior modeling

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Vishal Jain

Ref: RIITC-Postdoc-2027-B07

Name: Dr. Jawad Hussain Awan

Topic: Multi-model framework for robust deepfake detection

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-B08

Name: Dr. Harsh Khatter

Topic: Exploring hybrid quantum-classical machine learning with large language models for personalized decision systems

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Vishal Jain

Ref: RIITC-Postdoc-2027-C01

Name: Dr. Shreyas Rajendra Hole

Topic: IoT-integrated AI vision framework for dust monitoring and energy yield optimization in solar PV installations

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Vishal Jain

Ref: RIITC-Postdoc-2027-C02

Name: Dr. S. Thabasu Kannan

Topic: AI-driven multi modal predictive framework for climate risk assessment, evaluating climate adaptation policies and optimized climate monitoring networks

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-C03

Name: Dr. Khushboo Tripathi

Topic: Designing a lightweight personalized federated learning framework for intrusion detection in heterogeneous IoT environments

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-C04

Name: Dr. Anuja Arora

Topic: AI-driven multi-agent LLM system for clinical knowledge management and decision support

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-C05

Name: Dr. R. Maruthi

Topic: Lightweight elliptic curve cryptography and trust-aware authentication framework for distributed cyber security systems

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-C06

Name: Dr. M. Sakthivanitha

Topic: Adaptive cyber threat mitigation using lightweight cryptography and graph neural network-based trust modeling

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-C07

Name: Dr. Gulivindala Suresh

Topic: Enhanced YOLO-based framework for robust underwater object detection

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Mong-Fong Horng

Ref: RIITC-Postdoc-2027-C08

Name: Dr. Kamireddy Rasool Reddy

Topic: A deep learning-based framework for automated tooth segmentation in panoramic dental radiographs

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. S. Satyanarayana

Ref: RIITC-Postdoc-2027-D01

Name: Dr. A. Vivek Anand

Topic: AI & ML assisted development of high-performance sustainable composites for energy systems

Supervisor: Prof. Chin-Shiuh Shieh

Ref: RIITC-Postdoc-2027-D02

Name: Dr. Bapayya Naidu Kommula

Topic: Novel converter with logistic regression-based analysis of regenerative braking performance of solar PV-battery fed e-vehicle driven BLDC motor

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Dr. Elumalai PV

Ref: RIITC-Postdoc-2027-D03

Name: Dr. Benya Adeyanju Jamiu

Topic: Multimodal computer vision and AI for integrated behavior, risk, and reliability assessment in smart transportation systems

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Shashi Kant Gupta

Ref: RIITC-Postdoc-2027-D04

Name: Dr. Mohammad Haroon

Topic: Sustainable and energy-efficient distributed computing through AI-driven predictive fault tolerance and self-healing mechanisms

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Shashi Kant Gupta

Ref: RIITC-Postdoc-2027-D05

Name: Dr. Shantanu Shahi

Topic: Trustworthy and explainable deep learning for early detection of coronary artery disease from multimodal cardiac imaging

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Shashi Kant Gupta

Ref: RIITC-Postdoc-2027-D06

Name: Dr. Shish Ahmad

Topic: Edge-assisted energy-efficient post-quantum authentication and key management framework for resource-constrained IoT devices

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Shashi Kant Gupta

Ref: RIITC-Postdoc-2027-D07

Name: Dr. Phulara Shaik Abdul Lateef Haroon

Topic: Vision-language foundation models for automated radiology report generation

Supervisor: Prof. Chin-Shiuh Shieh

Co-supervisor: Prof. Jagadish R M