



ANNAMACHARYA UNIVERSITY

EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY
(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)
Rajampet, Annamayya District, A.P – 516126, INDIA

Faculty Profile

Basic Information:

NAME : Dr.N.PENCHALAI AH
DESIGNATION : Associate Professor & HoD
DEPARTMENT : AI&ML
DATE OF BIRTH : 15-07-1988
DATE OF JOINING : 18-06-2010
EMAIL ID : npc@aitsrajampet.ac.in
EMPLOYEE ID : AITS051015

Academic Profile:

Qualification	Name of the Board/University	YEAR
Ph.D	University of Technology, Jaipur	2021
M.Tech.	JNTU Hyderabad	2014
B.Tech	JNTU Anantapuram	2009
Inter	Board of Intermediate Education, Hyderabad	2005
SSC	Board of Secondary Education, Hyderabad	2003

Research Details:

1. Areas of Specialization	:	Internet of Things, Artificial Intelligence, Machine Learning, Data Mining and Cloud Computing
2. No. of Publications	:	36
3. Awards Received	:	02
4. Research Guidance		
	No. of PhD Guided:	06 (pursuing)
	No. of M.Tech. Guided:	NIL
	No. of B.Tech. Guided:	16 Batches
5. Details of Professional Membership:		1. ISTE - LM143066 2. IFERP - PMIN35647918 3. IAENG - 283534 4. CSTA - Basic Member



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6. Subjects Taught	: <u>B.Tech:</u> <ol style="list-style-type: none">1. Distributed Data Bases,2. Computer Graphics,3. Information Security,4. Cryptography and Network Security,5. Web Technologies,6. Web Programming,7. Human Computer Interaction,8. Advanced Computer Architecture,9. Database Management systems,10. Wireless Sensor Networks,11. Mobile Computing,12. Introduction to C and Data Structures,13. Problem Solving Techniques and Introduction through C,14. Internetworking with TCP/IP,15. Distributed Systems,16. Software Engineering,17. Software Testing Methodology,18. Internet of Things,19. Cloud Computing, Python Programming,20. Data Structures through Python,21. DevOps,22. Machine Learning. <u>M.Tech:</u> <ol style="list-style-type: none">1. Mobile Computing,2. Distributed Data Bases,3. Advanced Computer Architecture,4. Web Technologies,5. Cryptography and Network Security,6. Internet of Things and its Applications.
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Publication Details:

Title	Publisher	Published Year
1. Improving Global Supply Chain Security and Transparency through Blockchain and IoT Integration with Deep LSTM and RNN	IEEE (ICDSIS)	2025
2. IoT Intrusion Detection System for Vehicle and Emission Monitoring: Enhancing Cybersecurity in Connected Transportation	IEEE (ICCCMLA)	2025
3. Advanced Detection of Cyber-Physical Attacks in Manufacturing using LSTM-KNN	IEEE (ICDSNS)	2024
4. Machine Learning Meets Crime Prevention: A Stacked Generalization Approach for Identifying High-Risk Zones	SSRN / e-Prime	2024
5. Hand Gesture Recognition Using CNN	Springer (CSAT)	2023
6. IoT-Based Air Quality Monitoring System with Server Notification	Springer (CSAT)	2023
7. Machine Learning Based Android App Recommendation System	Dogo Rangsang Research Journal	2023
8. Fuzzy Deep Neural Network-Based Novel Feature Selection for Attack Detection in Big Data Environment	IJFANS	2022
9. A Comprehensive Survey on Rice Leaf and Seedling Disease Detection Systems	IJFANS	2022
10. DeepLung: Harnessing CNNs for Accurate Lung Cancer Prediction	IJFANS	2022
11. Covert Channel detection in Wireless Sensor Network	Dogo Rangsang Research Journal	2022



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12. Analysis Of Medical Image Data By Deep Convolution Techniques And Kernel Density Estimation	NeuroQuantology	2022
13. Clustered Single-Board Devices with Docker Container Big Stream Processing Architecture	Computers, Materials & Continua (CMC)	2022
14. A hybrid network intrusion detection using Darwinian particle swarm optimization and stacked autoencoder hoeffding tree	Mathematical Biosciences and Engineering (MBE)	2021
15. An IoT Based Smart Wearable Device for Women Safety	International Research Journal on Advanced Science Hub	2021
16. Systematic Swarm Process Statistics Aggregation as Concerns IoT Implement and Endemic Relevance Prevailing in Agriculture	IJOAASE	2020
17. IoT Based Smart Farming using Thingspeak and MATLAB	Springer (ICCCE 2020)	2020
18. IoT based Automatic Irrigation System using Wireless Sensor Networks	Springer (ICCCE 2020)	2020
19. Control Toxic Waste by Using Wireless Sensors, Arduino and Connecting Chip	Journal of Interdisciplinary Cycle Research	2020
20. ARDIOT: Arduino IoT based Advanced Irrigation	Journal of Interdisciplinary Cycle Research	2020
21. A Novel Method for the Identification of Phishing Web Sites and Secure Transaction	IJAEMA	2020
22. Energy Efficient Communication Approach Towards the Green IoT	Journal of Information and Computational Science	2020
23. Smart Irrigation and Crop Protection from Wild Animals	Journal of Engineering Sciences	2020



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24. IoT Based Smart Farming: Applications, Technologies and Future Vision	IJRTE	2019
25. IoT Based Smart Health Monitoring and Management with Cloud-Based processing	IJMTE	2019
26. Distributed Load Balancing Algorithm for Wireless Sensor Networks	IJMTE	2019
27. Security and Power Management for Ethernet-Based Smart Home Framework Through IoT	IJER	2019
28. Protected Information Recovery for Decentralized Detection in Wireless Sensor Networks	IJMTE	2018
29. IoT enabled Intelligence Health Surveillance system	IJRAR	2018
30. A Exploration Wrapping Learning on Smart Agronomics Proving Internet of Things	IJOAASE	2018
31. E-Agriculture Proving Internet of Things	IJOAASE	2018
32. Efficient Management of Electricity Using Internet of Things	JETIR	2017
33. Securing User Location in Geo Social Networking Using Coordinate Conversions	IJCSIT	2014
34. An Effective Design of Processing Query Related to Broadcast Environment	IJRRECS	2013



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Patent Details:

Title of Patent	Submitted/Published/Awarded
1. SYSTEM AND METHOD FOR DETECTUION AND CONTROL OF CYBER ATTACKS IN LARGE NETWORK USING DATA MINING	Published
2. MINDFUL METRICS: UTILIZING ML TO MITIGATE FACULTY STRESS IN EDUCATIONAL INSTITUTIONS	Published
3. A STUDY ON THE ROLE OF TOURISM IN THE REDUCTION OF POVERTY AND ECONOMIC GROWTH	Published
4. THE ROLE OF MACHINE LEARNING AND BIOTECHNOLOGY IN AUTONOMOUS HARVESTING AND DATA DRIVEN MANAGEMENT FOR ADVANCEMENTS IN AGRICULTURE	Published
5. OPTIMISING MACHINE LEARNING MODELS FOR ACCURATE PREDICTION OF STUDENT LEARNING OUTCOMES	Published
6. A CRITICAL ANALYSIS OF MACHINE LEARNING AND MODERN PEDAGOGY IN IMPROVING TEACHING PRACTICESIN HIGHER EDUCATION	Published