**ANNAMACHARYA UNIVERSITY FACULTY DETAILS FOR WEBSITE**

**About Profile**

NAME: **Dr N PENCHALAIAH**

DATE OF BIRTH: **15-07-1988**

DESIGNATION: **Associate Professor**

DEPARTMENT: **AI&ML**

EMAIL ID: **npc@aitsrajampet.ac.in**

DATE OF JOINING: **18-06-2010**

EMPLOYEE ID: **AITS 33 1015**

## 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. List of Publications: **34**
3. Awards Received : **02**
4. Research Guidance:
5. No. of PhD Guided: **3 Students (pursuing)**
6. No. of M.Tech Guided: **NIL**
7. No. of B.Tech Guided: **16**
8. Details of Professional Membership:

**1. IFERP - PMIN35647918**

**2. IAENG - 283534**

**3. CSTA - Basic Member**

1. Subjects Taught:

•**B.Tech: Distributed Data Bases, Computer Graphics, Information Security, Cryptography and Network Security, Web Technologies, Web Programming, Human Computer Interaction, Advanced Computer Architecture, Database Management systems, Wireless Sensor Networks, Mobile Computing, Introduction to C and Data Structures, Problem Solving Techniques and Introduction through C, Internetworking with TCP/IP, Distributed Systems, Software Engineering, Software Testing Methodology, Internet of Things, Cloud Computing, Python Programming, Data Structures through Python, DevOps, Machine Learning.**

**•M.Tech: Mobile Computing, Distributed Data Bases, Advanced Computer Architecture, Web Technologies, Cryptography and Network Security, Internet of Things and its Applications.**

## Publication Details

|  |  |  |
| --- | --- | --- |
| Title | Publisher | Published Year |
| IoT Intrusion Detection System for Vehicle and Emission Monitoring: Enhancing Cybersecurity in Connected Transportation | IEEE (ICCCMLA) | 2025 |
| Advanced Detection of Cyber-Physical Attacks in Manufacturing using LSTM-KNN | IEEE (ICDSNS) | 2024 |
| Machine Learning Meets Crime Prevention: A Stacked Generalization Approach for Identifying High-Risk Zones | SSRN / e-Prime | 2024 |
| Hand Gesture Recognition Using CNN | Springer (CSAT) | 2023 |
| IoT-Based Air Quality Monitoring System with Server Notification | Springer (CSAT) | 2023 |
| Machine Learning Based Android App Recommendation System | Dogo Rangsang Research Journal | 2023 |
| Fuzzy Deep Neural Network-Based Novel Feature Selection for Attack Detection in Big Data Environment | IJFANS | 2022 |
| A Comprehensive Survey on Rice Leaf and Seedling Disease Detection Systems | IJFANS | 2022 |
| DeepLung: Harnessing CNNs for Accurate Lung Cancer Prediction | IJFANS | 2022 |
| Covert Channel detection in Wireless Sensor Network | Dogo Rangsang Research Journal | 2022 |
| Analysis Of Medical Image Data By Deep Convolution Techniques And Kernel Density Estimation | NeuroQuantology | 2022 |
| Clustered Single-Board Devices with Docker Container Big Stream Processing Architecture | Computers, Materials & Continua (CMC) | 2022 |
| A hybrid network intrusion detection using Darwinian particle swarm optimization and stacked autoencoder hoeffding tree | Mathematical Biosciences and Engineering (MBE) | 2021 |
| An IoT Based Smart Wearable Device for Women Safety | International Research Journal on Advanced Science Hub | 2021 |
| Systematic Swarm Process Statistics Aggregation as Concerns IoT Implement and Endemic Relevance Prevailing in Agriculture | IJOAASE | 2020 |
| IoT Based Smart Farming using Thingspeak and MATLAB | Springer (ICCCE 2020) | 2020 |
| IoT based Automatic Irrigation System using Wireless Sensor Networks | Springer (ICCCE 2020) | 2020 |
| Control Toxic Waste by Using Wireless Sensors, Arduino and Connecting Chip | Journal of Interdisciplinary Cycle Research | 2020 |
| ARDIOT: Arduino IoT based Advanced Irrigation | Journal of Interdisciplinary Cycle Research | 2020 |
| A Novel Method for the Identification of Phishing Web Sites and Secure Transaction | IJAEMA | 2020 |
| Energy Efficient Communication Approach Towards the Green IoT | Journal of Information and Computational Science | 2020 |
| Smart Irrigation and Crop Protection from Wild Animals | Journal of Engineering Sciences | 2020 |
| IoT Based Smart Farming: Applications, Technologies and Future Vision | IJRTE | 2019 |
| IoT Based Smart Health Monitoring and Management with Cloud-Based processing | IJMTE | 2019 |
| Distributed Load Balancing Algorithm for Wireless Sensor Networks | IJMTE | 2019 |
| Security and Power Management for Ethernet-Based Smart Home Framework Through IoT | IJER | 2019 |
| Protected Information Recovery for Decentralized Detection in Wireless Sensor Networks | IJMTE | 2018 |
| IoT enabled Intelligence Health Surveillance system | IJRAR | 2018 |
| A Exploration Wrapping Leaning on Smart Agronomics Proving Internet of Things | IJOAASE | 2018 |
| E-Agriculture Proving Internet of Things | IJOAASE | 2018 |
| Efficient Management of Electricity Using Internet of Things | JETIR | 2017 |
| Securing User Location in Geo Social Networking Using Coordinate Conversions | IJCSIT | 2014 |
| An Effective Design of Processing Query Related to Broadcast Environment | IJRRECS | 2013 |

## Patent Details

| **Sno.** | **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** |