Department of AI&ML

Faculty Profile

Name	: Mrs.S.Indhumathi	
Designation	: Head of Department (CSE – AI&ML)	
Qualification	: M.E., (Ph.D.)	
Total Experience	: 10 years	
JNTUH ID	: 7212-211217-213840	
AICTE ID	: 1-1472036423	
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	indhume11@gmail.com	

PATENT

- ✓ Published on title "A device for diagnosis of brain tumors using machine learning and sensors"

AWARDS:

- ✓ Received Forefront Knowledge Award from AIMER Society.
- ✓ Received Yuva Acharya Award from Bharath Education Excellence
- ✓ Received certification of appreciation from Nextwave Technology for executing Webinar on "AI for   Students: Build your first Generative AI Model".

BOOK PUBLISHED:

- ✓ Published book on the topic "Natural Language Processing" by Scientific International publishing house with ISBN number 978-93-6132-488-6

- ✓ Published book on the topic "NLP Innovations Integrating AI for Enhanced Applications" by Scientific International publishing house with ISBN number: 978-81-979349-2-6

RESEARCH EXPERIENCE:

Co-Investigator "Implementation Of Agriculture Based Animal Repellent System Using Deep Learning "Under **Vision Viksit Bharat@2047 (VVB@2047)** From **Indian** Council Of Social Science Research **(ICSSR)** by Ministry of Education, India
(Application No : Icssr-Vb-2024-1719)
Submitted On 18-04-2024(INR 1.5 million/ 17, 300USD) – Waiting for Result

Co-Investigator The Prediction And Classification On Trachoma Disease Using Transfer Learning Method Under **Vision Viksit Bharat@2047 (VVB@2047)** From Indian Council Of Social Science Research **(ICSSR)** by Ministry of Education, India
(Application No: Icssr-Vb-2024-3751)
Submitted On 18-04-2024 (INR 1.2 Million/ 14, 300USD). - Waiting for Result

PROGRAM ORGANIZED:

- ✓ **Workshop on Computing with OneAPI AI Toolkit**
  27.03.2023 & 28.03.2023 – Sphoorthy Engineering College
- ✓ **Guest Lecture - "Communication Skills for Effective Teamwork" and "Positive Attitude – A Gateway to Success"**
  13.12.2022 – Sphoorthy Engineering College
- ✓ **Webinar on "Current Industry Landscape in AI & ML"**
  13.06.2023 – Sphoorthy Engineering College
- ✓ **Webinar on "AI for Students: Build Your First Generative AI Model"**
  12.10.2023 – Sphoorthy Engineering College
- ✓ **Guest Lecture on "Reinforcement Learning"**
  08.12.2023 – Sphoorthy Engineering College
- ✓ **Seminar on "Genetic Algorithm & Analytical Learning in Machine Learning"**
  30.12.2023 – Sphoorthy Engineering College
- ✓ **Workshop on "Deep Dive into Convolutional Neural Networks & NLP"**
  04.01.2024 & 05.01.2024 – Sphoorthy Engineering College
- ✓ **Bootcamp on UAV/Drone Technology**
  10.06.2024 to 14.06.2024 – Sphoorthy Engineering College
- ✓ **Seminar on "AI Insights: Predictive Power of ML, DL & NLP"**
  14.05.2024 to 18.05.2024 – Sphoorthy Engineering College
- ✓ **CSIR-Sponsored Two-Day National Seminar on "Modern Trends in Wireless Sensor Networks for Health Care Systems in Rural Applications"**
  27.09.2023 & 28.09.2023 – Bharathiyar Institute of Engineering for Women

MEMBERSHIP:

- ✓ Member of International Association of Academic plus Corporate.

- ✓ **IEEE ICAISS 2023**
  Title: IoT-Enabled Weather Monitoring and Rainfall Prediction using Machine Learning Algorithm
  Page No: 979-8-3503-2579-9/23/ ©2023
- ✓ **International Journal of Innovative Research in Technology**
  Title: Smart Traffic Management and Optimization System Using Cloud Computing
  Volume: 10, *Issue:* 10, *March 2024*
- ✓ **International Journal of Innovative Research in Technology**
  Title: Machine Learning Model for Diabetes Prediction Using SVM and Random Forest
  Volume: 10, *Issue:* 10, *March 2024*
- ✓ **International Journal of Research and Analytical Reviews**
  Title: Evolving Perspectives on Computer Security: From Physical Safeguards to Modern Data Protection Challenges
  Volume: 1, *Issue:* 4, *December 2014*
- ✓ **International Journal of Advanced Research in Computer and Communication Engineering**
  Title: A Survey on Cloud Security Issues and Challenges
  Volume: 6, *Issue:* 3, *March 2017*
- ✓ **Journal of Emerging Technologies and Innovative Research**
  Title: Enhancing Security and Efficiency in Agent-Less Publish/Subscribe Systems: A Novel Approach Using Pairing-Based Cryptography and Lightweight Encryption
  Volume: 5, *Issue:* 6, *June 2018*
- ✓ **Journal of Emerging Technologies and Innovative Research**
  Title: Optimizing Cloud Computing: Understanding Load Balancing for Enhanced Resource Allocation and Application Performance
  Volume: 8, *Issue:* 9, *September 2021*
- ✓ **International Journal of Functional Management (IJFM)**
  Title: Cloud Computing Security: From Single to Multi-Clouds
  Volume: 5, *Issue:* 2, *2013*

CONFERENCE PRESENTATIONS:

- ✓ **Recent Advances in Engineering, Technology & Applied Sciences–2023 (RAETAS-2023)**
  Title of Paper: Music Recommendation System Based on Facial Expression
  Place of Conference: Society Towards Advancement of Rural Education in association with Maharana Pratap School of Pharmacy, Lucknow
- ✓ **NCIIT 2024**
  Title of Paper: Availability and Tracking of Buses through Various Routes using GPS Tracker
  Place of Conference: Bannari Amman Institute of Technology, Tamilnadu

- ✓ **Advances in Communication and Computing, 2011**
  Title of Paper: Privacy Preserving Authentication Protocol for Wireless Communication
  Place of Conference: Karpagam College of Engineering, Coimbatore
- ✓ **Automation, Computing, Communication and Control System, 2010**
  Title of Paper: Minimizing the Cost of Location Updates in Location Management
  Place of Conference: Vivekanandha College of Engineering for Women, Tiruchengode
- ✓ **Networks, Intelligence and Computing Technologies, 2011**
  Title of Paper: Balancing Revocation and Storage Trade-Off in Privacy Preserving Authentication Protocol
  Place of Conference: Karpagam University, Coimbatore
- ✓ **Competency Building Strategies in Business and Technology, 2013**
  Title of Paper: Cloud Computing Security: From Single to Multi-Clouds
  Place of Conference: Sri Ganesh School of Business Management, Salem

CERTIFICATION COMPLETED:

- ✓ Introduction to Natural Language Processing on November 16th 2022 through Infosys Springboard
- ✓ Computer Vision 101, November 17th 2022 through Infosys Springboard
- ✓ Database Design on 10th September 2022 through Oracle Academy
- ✓ Artificial Intelligence with Machine Learning in Java on July 2022 through oracle academy
- ✓ Deep Learning on November 16th 2022 through Infosys Springboard
- ✓ Introduction to Artificial Intelligence on November 18th 2022 through Infosys Springboard
- ✓ Data Science on November 15th 2022 through Infosys Springboard
- ✓ Introduction to Robotics and Automation on November 13th 2022 through Infosys Springboard
- ✓ "AI for women", March 2023 through GUVI & Google for Education
- ✓ Completed **Android Developer Educator** development program offered by Eduskills.
- ✓ NLP and text mining – Simplilearn
- ✓ Introduction to AI – Simplilearn
- ✓ Python tutorial – Simplilearn
- ✓ Basics of Nutrition - Poshan Abhiyan

- ✓ NEP 101: Understanding NEP 2020 Frameworks - LITE
- ✓ Text classification in NLP – Great Learning
- ✓ Introduction to Large Language Models – Google Cloud
- ✓ **AICTE Leadership in Teaching Excellence (LITE) – WD 101** course completed

FDP/ WORKSHOP/WEBINAR ATTENDED:

- ✓ Attended multiple 5-day FDPs, including **NLP and ChatGPT Applications**, **Machine Learning and Artificial Intelligence**, **Machine Learning Applications: Applications & Use Cases**, **Python Programming with Django Framework for Building Web Applications**, **Cloud Infrastructure (AWS)**, **Chat GPT & Prompt Engineering**, **Data Science Mastery**, **Gen AI and Prompt Engineering using Microsoft Copilot**, **Data Engineering**, and **Ethical Hacking**.
- ✓ Completed 10-hour FDPs on **NLP, Computer Vision, and Artificial Intelligence** and **Deep Learning and Artificial Intelligence**.
- ✓ Engaged in a 15-day **NEP 2020 Orientation & Sensitization Programme**.
- ✓ Attended a 1-day **National Level Webinar on "AI in Cybersecurity"** and a **Webinar on "Source to Datasets"**.
- ✓ Completed a 15-hour training program on **Chat GPT and Generative AI**.
- ✓ Participated in a 1-week FDP on **Artificial Intelligence, Machine Learning & Applications**.
- ✓ Completed a 2-week FDP on **Machine Learning and Artificial Intelligence**.
- ✓ Engaged in a 2-day FDP on **Foundations of Deep Learning and Its Applications**.
- ✓ Participated in a 5-day FDP on **Machine Learning in Big Data Applications and Security Challenges**.