

1. Name of Faculty **Dr. K. PRABHAKAR Ph. D.**
2. Designation Professor
3. Nature of Job/Appointment Regular (04/09/2023)
4. Date of Joining 04/09/2023
5. E-mail prabhakark_aiml@cbit.ac.in
prabhakarcs@gmail.com
6. Contact No: Mobile No: 9705795005



- | 7. Education Qualifications | Name of the Degree | Class |
|-----------------------------|----------------------------|------------------------------|
| 8. Ph. D | Doctor of Philosophy (CSE) | Awarded |
| 9. PG | M. Tech. (CSE) | First Class with Distinction |
| 10. UG | B. Tech. (CSE) | First Class |

11. **Work Experience**

12. Teaching 18 Years
13. Research 13 Years
14. Others ----

15. Area of Specialization
- Software Engineering
 - Deep Learning

16. Professional Memberships
- ACM
 - IAENG
 - IEEE

17. Responsibilities held at Institution Level I/C Head-Department of AI&ML.

18. Responsibilities held at Department Level
- R&D Coordinator
 - NIRF Coordinator
 - BoS Member for CSE(AIML), AI&ML

19. Courses Handled at Under Graduate / Post Graduate Level.
- Software Engineering.
 - Software Testing Methodologies.
 - Object Oriented Software Engineering.
 - Object Oriented Analysis & Design
 - Deep Learning
 - Soft Computing
 - Image Processing
 - Software Architecture
 - Software Requirements and Estimation
 - C-Language and Data Structures.
 - Advanced Data Structures.
 - Principles of Programming Languages.
 - OOP through JAVA, C++.
 - Web-Technologies.
 - Computer Organization.
 - Advanced Computer Architecture.
 - Database Management Systems.
 - Operating Systems.
 - Electronic Commerce.
 - Python Programming
 - Digital Logic Design
 - Design Patterns
 - Cloud Computing
 - Internet of Things
 - E-Commerce
 - Knowledge Representation and Reasoning
 - Socially Relevant projects
 - Software Engineering (CASE-Tools) :
Visual Paradigm, Rational Rose, Selenium,

TM

INSTITUTE OF TECHNOLOGY

సంస్కృత విశ్వవిద్యాలయం

Unified Functional Testing (UFT/QTP) Tool.

20. No. of Papers Published	National Journals – Nil	International Journals – 25
	National Conference – Nil	International Conference – 12
21. Projects Carried out	UG Projects: 58 PG Projects:10 ➤ IOT incubator Cell for Agricultural Applications. under A Scheme for promotion of Innovation, Rural Industry and Entrepreneurship (ASPIRE), India, (Regn No:AP/2019/0237208), Budget: 36 L Duration: Sep. 2020 to Feb. 2022.	
22. Research Projects:	➤ In-House Funding for the Major Project “Parkinson’s Disease Detection using EEG via Deep learning”, for the financial year 2025. Budget: 2 L Duration: April 2025 to March. 2026.	
23. Consultancy Projects:	➤ Pre-Dental Treatment Analysis using Machine Learning Techniques, U-Lab Systems, USA. Duration: Dec. 2020 to Feb. 2022 Technology: ML with Python ➤ Patient Medical Report management using WCM tool, Sree Overseas Software Solutions Pvt. Ltd, Vijayawada, Tools: Adobe Experience Manager 6.5, AEM Forms Designer, AEM Forms Workbench, Oracle and Notepad. 1. Dr. PRABHAKAR KANDUKURI , “IOT SENSORS BASED MULTI-FUNCTIONAL AND INTELLIGENT WALK GUIDING STICK FOR VISUAL DISABLED PERSON” Field of Invention: BIO-MEDICAL ENGINEERING, Application No: 201941051603, Publication Number: 51/2019, Publication Date: 20/12/2019. 2. Dr. PRABHAKAR KANDUKURI , “GENERIC, MAPPABLE AND AUTOMATICALLY CONFIGURABLE SINIFICATION SOFTWARE”, Application No.202041010555 A, INDIA, Date of filing of Application: 12/03/2020, Publication Date: 20/03/2020. 3. Dr. PRABHAKAR KANDUKURI , “SECURE HUMAN AUTHENTICATION SYSTEM WITH THREE LEVEL MULTI MODEL BIOMETRIC FUSION USING ARTIFICIAL NEURAL NETWORKS”, Application Number: 202141016077, Field of Invention: Computer Science, Date of Filing: 05/04/2021, Publication Date (U/S 11A): 16/04/2021.	
24. Patents	4. Dr. PRABHAKAR KANDUKURI , “MACHINE LEARNING-ENABLED PREDICTIVE MAINTENANCE FOR IOT DEVICES”, Application Number:202441019528, Field Of Invention: Computer Science, Date of Filing: 16/03/2024 PUBLICATION DATE (U/S 11A):29/03/2024. 5. Dr. PRABHAKAR KANDUKURI , “INTELLIGENT BIONIC ARM FOR ASSISTING AMPUTEES USING CONVOLUTIONAL NEURAL NETWORKS”, Application Number: 202441036842, Field of Invention: BIO-MEDICAL ENGINEERING, Application Filing Date 09/05/2024. 6. Dr. PRABHAKAR KANDUKURI , “METHOD TO CLASSIFY MELANOMA USING CONVOLUTIONAL NETWORK”, application Number 202441019518, Field of Invention: Computer Science Application Filing Date 16/03/2024.	
25. Technology Transfer	Reviewer for 1. Advancement in Electronics & Communication Engineering, AECE – 2023 2. 2nd International Conference on Sustainable Energy and Future Electric transportation (SEFET) 2022. 3. International Conference on Artificial Intelligence Trends and Pattern Recognition (ICAITPR) 2022. 4. International Conference on Artificial Intelligence Trends and Pattern Recognition (ICAITPR) 2024	

26. No. of Books/Chapter Published with details
1. Artificial Intelligence & Cognitive Computing, 2018. Springer-Book Chapter: "Software Modernization through Model Transformations".
 2. Regression Testing: A Model Driven Approach, Lambert Academic Publishing –ISBN 978-620-0-65650-6
27. Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (Attended and/or Organized).
- Programs Attended: 35**
Programs Organized: 07
28. Details of Journal Publications/ Conferences : **30 Journals**

International Journal:

List of Publications (Under progress): (*International Journals*)

1. Prabhakar Kandukuri et al, "EEG2VERSE: A thought transformation into words (**SCI-Under Progress(Submitted)**).
2. Prabhakar Kandukuri et al, "KiT-GAN: A Hybrid Deep Learning Framework for Precise Chronic Kidney Disease Detection and Classification" (**SCI-Under Progress(Submitted)**).
3. Prabhakar Kandukuri et al, "EEG-Based Parkinson's Disease Recognition" (**SCI-Under Progress-Not Submitted**).

List of Publications (Publised): (*International Journals*)

4. Prabhakar Kandukuri et al, "AI-SCAN: Advancing plant leaf disease detection with Transcendental Residual Convolutional Swin Transformer with hybrid optimizer." *Agriculture Bioscience* 6.1 (2025): 0022. (**SCI-Q1**).
5. Prabhakar Kandukuri et al, "Deep Learning Based RAGAE-SVM for Chronic Kidney Disease Diagnosis on Internet of Health Things Platform" *Journal of Bigdata*. (**SCI-Q1**).
6. Prabhakar Kandukuri et al, "Advancing Quantum Key Distribution: Challenges, Trends, and Future Prospects", *Journal of Information Systems Engineering and Management*, Vol. 10 No. 27s (2025), <https://doi.org/10.52783/jisem.v10i27s.4401> (**Scopus**)
29. 7. Prabhakar Kandukuri , et al. "Deep Learning Based Malware Detection." *Journal of Theoretical and Applied Information Technology* 102.12 (2024). (**Scopus**)
8. Prabhakar Kandukuri , "Deciphering Market Dynamics: A Data Science and Machine Learning Approach Using Chaos Theory for Trend Prediction". *International Journal of Intelligent Systems and Applications in Engineering*, vol. 12, no. 8s, Dec. 2023, pp. 426-34, (**Scopus**)
9. Prabhakar Kandukuri , et al. "Event-based Smart Contracts for Automated Claims Processing and Payouts in Smart Insurance." *International Journal of Advanced Computer Science & Applications* 15.4 (2024). (**Scopus**)
10. Prabhakar Kandukuri , et al. "Enhancing IoT Network Security: ML and Blockchain for Intrusion Detection." *International Journal of Advanced Computer Science & Applications* 15.4 (2024). (**Scopus**)
11. Prabhakar Kandukuri , et al. "Binary Image Classification on Fashion-MNIST Using TensorFlow-Quantum and CIRQ". *International Journal of Intelligent Systems and Applications in Engineering*, vol. 12, no. 1, Dec. 2023, pp. 720-7(**Scopus**)
12. Prabhakar Kandukuri, et al. "Developing a Context-Aware Convolutional NeuralNetwork (CACNN) for Enhanced Phishing Website Detection" Vol. 20 No. 5s (2024), (Scopus)
DOI: <https://doi.org/10.52783/jes.1951> (**Scopus**)

13. **Prabhakar Kandukuri et al.** "Sugar Cane Leaf Disease Classification and Identification Using Deep Machine Learning Algorithms" Journal of Theoretical and Applied Information Technology, ISSN:1992-8645(**Scopus**)
14. **Prabhakar Kandukuri et al.**, "Machine Learning Framework for Generating Photorealistic Photos of Real Time Objects Using Adam Optimizer by A Generative Adversarial Network (GAN)", International Journal on Recent and Innovation Trends in Computing and Communication (**Scopus**)
15. **Prabhakar Kandukuri et al.**, "Multivariate Economic Analysis of the Government Policies and COVID'19 on Financial Sector" International Journal of Computer Applications in Technology, **Inderscience Enterprises Ltd., (Scopus)**
16. **Prabhakar Kandukuri et al.**, "**Mobile Agent Based Key Update In Wireless Sensor Networks**", International Journal of Grid and Distributed Computing, Vol. 14, No. 1, (2020), pp. 497-512, ISSN: 2005-4262 IJGDC, Copyright ©2021SERSC.
<http://sersec.org/journals/index.php/IJGDC/article/view/35885/19839> **Web of Science (ESCI)**
17. **Prabhakar Kandukuri et al.**, An AI Based Offensive Language Detection System, Journal of Emerging Technologies and Innovative Research, 2021 JETIR July 2021, Volume 8, Issue 7 www.jetir.org (ISSN-2349-5162), <https://www.jetir.org/papers/JETIR2107225.pdf>
18. **Prabhakar Kandukuri et al.**, "Machine Learning Algorithm Based Prediction of Heart Stroke Chances Based on Data Provided", International Journal of Advanced Research in Engineering and Technology (IJARET). Volume 11, Issue 12, December 2020, pp.2006-2019, Article ID: IJARET_11_12_190, ISSN Print: 0976-6480 and ISSN Online: 0976-6499, DOI: 10.34218/IJARET.11.12.2020.190 http://www.iaeme.com/MasterAdmin/Journal_uploads/IJARET/VOLUME_11_ISSUE_12/IJARET_11_12_190.pdf . (**Scopus**).
19. **Prabhakar Kandukuri, et al.**, "Detection of Position Falsification Attack in VANETs using ACO", International Journal of Control and Automation, Vol 12 No 6 (2019): Vol 12 No 6 (2019). (**Scopus**).
20. **Prabhakar Kandukuri, et al.**, "Dynamic Data Analysis and Decision Making on Twitter Data", International Journal of Innovative Technology and Exploring Engineering (IJITEE), ISSN: 2278-3075, Volume-9 Issue-1, November, 2019. (**Scopus**).
21. **Prabhakar Kandukuri, et al.**, "A Model-Driven Approach to Regression Testing of Reusable Software", International Journal of Pure and Applied Mathematics, Volume 120 No. 6 2018, 3571-3591(UGC listed) <https://acadpubl.eu/hub/2018-120-6/3/259.pdf>
22. **Prabhakar Kandukuri, A. Ananda Rao, K. Venugopala Rao** "An Approach to Regression Testing based on Grounded Theory Specifications", International Journal of Computer Sciences and Engineering, Vol.-6, Issue-6, pp:352-361, June 2018 E-ISSN: 2347-2693.
23. **Prabhakar Kandukuri, A. Ananda Rao, K. Venugopala Rao** "A Model-Driven Approach to Regression Testing for Software Modernization", International Journal of Scientific Research in Computer Science Applications and Management Studies, Volume 7, Issue 3, pp: May 2018.
24. **Prabhakar K., A. Ananda Rao, K. Venugopala Rao**, "Cost-Effective Model-Based Regression Testing", "IAENG– World Congress on Engineering", [Lecture Notes in Engineering and Computer Science](#), Volume 2229, Pages 241 - 2462017 (**Scopus**).
25. **K. Prabhakar et al.**, "Rate Based Pacing with Various TCP Variants", International Journal of Trend in Research and Development, Volume 3(3), ISSN: 2394-9333, Jun 2, 2016.
26. **K. Prabhakar et al.**, "Dynamic Component Safety Analysis: A Regression-Based Code Coverage Approach", International Journal of Electronics Communication and Computer Engineering Volume 4, Issue (6) NCRTCST-2013, ISSN 2249–071X.
27. **K. Prabhakar et al.**, "Detecting Unsafe Component Loadings using Static Techniques", International

28. **K. Prabhakar** et al, "MARTE Genetic Algorithm for Uncovering Scenarios Leading to Data Races in Concurrent Systems", International Journal of Information and Computation Technology. ISSN 0974-2239 Volume 3, Number 3 (2013), pp. 201-210.
29. **K. Prabhakar** et al, "Object Detection With Voice Translation" Journal of Fundamental & Comparative Research, Vol. VIII, No. 1(XIX) : 2022, ISSN: 2277-7067 (UGC Journal)
30. **K. Prabhakar** et al, "Model for Detecting COVID-19 on Chest X-Ray using CNN", Dogo Rangsang Research Journal, Vol. 09, Issue. 01, No. 01: 2022. (UGC Care Group I Journal)

International Conferences:

1. **Kandukuri, Prabhakar**, et al. "Enhanced Edge Attention-Based SRCNN for Retinal Image Super-Resolution." *2025 International Conference on Intelligent Systems and Computational Networks (ICISCN)*. IEEE, 2025. (IEEE Scopus).
2. **Kandukuri, Prabhakar**, et al. "Advancing Human Detection in UAV-Based Search and Rescue using Transfer Learning Approach" 3rd IEEE International Conference on Device Intelligence, Computing, and Communication Technologies (DICCT-2025) 21-22 March, 2025. (IEEE Scopus).
3. **Kandukuri, Prabhakar**, et al. "Enhanced Fruit and Vegetable Image Recognition with CNN and MobileNetV2" 6th International Conference on Machine Learning, Image Processing, Network Security and Data Sciences (MIND 2024), during 20 - 21 December 2024. (Springer Scopus).
4. **Kandukuri, Prabhakar**, et al. "NLP Approaches for Emotion Detection using Speech" 1st International conference on Innovative Computing Technologies (ICICT-2024) held during 13-14 December 2024, (Scopus).
5. **Kandukuri, Prabhakar**, et al. "Deep Learning Based UAV-Assisted Search and Rescue for Human Detection in Disaster Scenarios", 1st International conference on Innovative Computing Technologies (ICICT-2024) held during 13-14 December 2024, (Scopus).
6. **Kandukuri, Prabhakar**, et al. "Image Colorization Approaches", 1st International conference on Innovative Computing Technologies (ICICT-2024) held during 13-14 December 2024, (Scopus).
7. **Kandukuri, Prabhakar**, et al. "Automating and Enhancing Requirement Engineering Process through Large Language Models" 2nd International Conference on Multidisciplinary Research in Education, Science and Technology, during th th 29 - 30 March, 2025.
8. **Kandukuri, Prabhakar**, et al. "Implementation of multi scale features and group based models for facial emotion identification of video pictures using deep learning techniques." *AIP Conference Proceedings*. Vol. 3101. No. 1. AIP Publishing, 2024.
9. **Kandukuri, Prabhakar**, et al. "Sustainability-centric integration software requirements validation." *MATEC Web of Conferences*. Vol. 392. EDP Sciences, 2024.
10. **Prabhakar Kandukuri**, et al, "OCR for devanagari script." *MATEC Web of Conferences*. Vol. 392. EDP Sciences, 2024.
11. **Prabhakar Kandukuri**, et al, "Blood group determination using fingerprint", *AIEC Web Conf*. Volume 392, 2024. International Conference on Multidisciplinary Research and Sustainable Development (ICMED 2024)
12. **Prabhakar Kandukuri**, et al, "Quantifying the Impact and Growth of Smart Innovation, Systems and Technology: A Bibliometric Approach Mapping the Research Landscape Over 12 Years." In International Conference on Human-Centric Smart Computing, pp. 37-54. Singapore: *Springer Nature* Singapore, 2023.
13. **Prabhakar Kandukuri**, et al, A Novel Approach of Smart Water Flow Meter using IOT", International conference on Design and manufacturing aspects for sustainable energy, ICMED2021, (Scopus).
14. **Prabhakar Kandukuri**, et al. "Paddy Leaf Disease Identification on Infrared Images based on CNN with Auto Encoders," 2023 Second International Conference on Augmented Intelligence and Sustainable Systems (ICAISS), Trichy, India, 2023, pp. 277-281, doi: 10.1109/ICAISS58487.2023.10250752. IEEE, (Scopus)
15. **Prabhakar Kandukuri**, et al. "Intelligent Agribusiness System-An Echo Friendly IOT based Approach." *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023. (Scopus)
16. **Prabhakar Kandukuri**, et al. "OCL Based Approach for Sustainable ML Model Development." *E3S Web of Conferences*. Vol. 430. EDP Sciences, 2023. (Scopus)
17. **Prabhakar Kandukuri** et al, "Project Based Learning through MOOCS", IEEE 6th International

- Conference on MOOCs, Innovation and Technology in Education – MITE2018, Nov 29-30, Hyderabad, India, 2018. **IEEE (Scopus)**.
18. **Prabhakar Kandukuri**, “**Software Modernization through Model Transformations**”, International Conference on Artificial Intelligence & Cognitive Computing, AICC-18., 02-03, Feb 2018, Hyderabad, India, 2018. **Springer (Scopus)**.
19. **K. Prabhakar** et al, “A Queuing Theory Implementation of Time Slicing Based Multiprocessor Scheduling” Paper Published in International Conference on Emerging Technology Trends in Cloud Computing (**ICETT-2011**), Kerala-India-MAR 2011.

International Conferences: (Submitted)

1. **Kandukuri, Prabhakar**, et al. “Image Colorization using CGAN”, International Conference on Next Generation of Green Information and Emerging Technologies, IEEE. Gunupur, odisha, India.
2. **Kandukuri, Prabhakar**, et al. “Exploring Deep Learning Techniques for Data Augmentation in Medical Image Datasets: A Survey”4th 2025 IEEE World Conference on Applied Intelligence and Computing.
3. **Kandukuri, Prabhakar**, et al. “VoiceGuard: Leveraging Deep Voice Recognition for Advanced Deepfake Detection” 5th International Conference Intelligent Systems and Machine Learning.

