Dr. D. SHANTHI
Professor & Head of the Department
Department of Information Technology
Vignan Institute of Technology & Management for womens, Hyd

Mobil No: +91 8125174595
Email_id: drshanthicse@gmail.com

Education:

1. Post-doctoral (AI) from California Public University, USA, August 2022.
2. Completed AI & ML PG Diploma Course from NIT Warangal, March 2021, with a CGPA of 3.66 out of 4.
3. Registered for MSc in Psychology at Andhra University, Visakhapatnam, 2021.
4. Ph.D. in Computer Science and Engineering from Jawaharlal Nehru Technological University (JNTUH), Hyderabad, 2020.
5. M.Tech in Computer Science and Engineering from JB Institute of Engineering & Technology, JNTU, Hyderabad.
6. B.Tech in Computer Science and Engineering from Princeton College of Engineering, JNTU, Hyderabad.
7. Intermediate from Pragnya Junior College, Hyderabad.
8. SSC from SwamyDayanand High School, Hyderabad

Work Experience:

1. 18 years of teaching experience.
2. Presently working as a Professor & Head CSE AIML VMTW.
3. Adjunct Faculty at Anuradha Engineering College, Maharashtra, since 2024.

Research:

A. Research Projects:

1. “Early Stage Breast Cancer Detection Jacket” is shortlisted for Ignition Grant offered by Andhra University Incubation Centre.
2. “Life Saver at Rainy Season”, Concept is shortlisted under MSME project of 15lakhs.
3. Received Rs.50,000 as consultancy Project for “Food Spoilage Prediction at refrigerators” by ALGOLEAP.
4. “Smart Helmet with Smartphone Detection”, Patent is shortlisted for MSME project in Telangana state level for 15lakhs through ALEAP.
5. Research: Working as one of the Co-Investigator (as team size is 36no.s) for the project “Web Designing of Government and Aided Schools" sanctioned by " Government of Madhya Pradesh" of cost Rs. 6,011,2,302 (Six Crores Eleven Lakhs Two Thousand Three Hundred and Two Rupees only) and the tender number is "20682041/2021-2018-2019/07", from February 2019 to till the end of the project i.e., 2021.

B. Patents:

1. **US Patent:** "Symbol Recognition System: an image Recognition Algorithm to Process Images and to Identify symbols Using AI-Based Programming" (Published, 2021).
2. **UK Patent:** "Computer Controlled Telescope with Camera" (Granted, June 2023).

   Australian Patents:
3. "A Method of Text Mining in Ranking of Web Pages Using Machine Learning" (Granted).
4. "IWNA-Village Sanitation: Intelligent way to sanitation village and Notify the Authority" (Granted).
5. "Underwater Robots Design and Control Mechanism Using Particle Swarm Optimization Algorithm" (Granted).

   Indian Patents:
6. "Smart Helmet" (Granted).

7. "Cloud-based bus ticket generating machine" (Granted, June 2023).
8. "Enhanced Finger Print Authentication System By Gabor Filter and Classification Dictionaries Learning" .
9. "Intelligent Key Pattern through Biometric Input".
10. "BCS-Device: Device To Display The Breast Cancer Status".
11. "Automatic Computerized Intelligent Water Distribution system For Saving water" (Granted).
12. "IAD-System: Intelligent Accident Detectionion System" .
13. "WDM-SIM: Water Distribution Management SIM" .

C. Copyrights:

1. "IoT Based Management and Prediction of Currency Flow through UPI Transaction" (Canadian Copyright Registration, 2022).
2. "SYSTEM FOR SHARING IMAGES AND MULTIMEDIA MESSAGE IN A CLOUD NETWORK" (Copyright Registration, 2021).
3. "INTERNET OF THINGS (IOT) ENABLED SECURE SMART CITY APPLICATION" (Copyright Registration, 2021).

D. Books and Book Chapters:

Books Published:

1. "Object Oriented Analysis and Design through UML" (Hitech Publications, 2018).
2. "Software Engineering Principles and Techniques" (Zenith Educations and Research Solutions, 2019).
3. "Location Predicted Gregarious Networks" (Lambert Publications, 2020).
4. "Cloud Computing With AI" (Scholar's Press, 2021).
5. "Trends in Modern Technology and Engineering" (HighRise publications, 2022).
6. "Handbook of Artificial Intelligence" (Benthem Science publishers, 2023-Scopus).

Book Chapters:

1. "Smart Healthcare for Pregnant Women in Rural Areas" (Published in "Medical Imaging and Health Informatics", 2022).
2. "Smart Water Bottle with Smart Technology" (Published in "Handbook of Machine Learning", 2022).
3. "IoT Based Medical Diagnosis Expert System Application" (Published in "Lecture Notes on Data Engineering and Communications Technologies", 2020).

E. Research Papers:

1. “A Study of Deep Learning Techniques for Predicting Breast Cancer Types”, Dr.D.Shanthi, Softcomputing, Publisher: Springer 2023/5/2, page: 1-9.(SCI). https://doi.org/10.1007/s00500-023-08245-2
2. “One Time Key authorization Based Attribute Encryption and Decryption for Secured Message Communication”, Mada Prasad, M. Jagadeeshwar, D. Shanthi, Journal of Xi'an University of Architecture & Technology, Volume-3, Issue-2, Page: 17,2023(SCOPUS).
3. “Early stage breast cancer detection using ensemble approach ofrandom forest classifier algorithm”, Dr.D.Shanthi, Onkologia i Radioterapia 16 (4:1-6), 1-6, 2022.(SCI)
4. “Time_series data prediction problem analysis through multilayered intuitionistic fuzzy sets”, Dr.D.Shanthi, Soft Computing, 21st March 2022,https://doi.org/10.1007/s00500-022-07053-4(0123456789().,-volV)(0123456789(). ,-volV)- SCI“
5. An Ensemble Approach of GP, ACOT, PSO and SNN for Predicting Software Reliability”, Dr.D.Shanthi, International Journal of Engineering Systems Modelling and Simulation, Inderscience (Scopus, ESCI).
6. “Designing a reliable and cost-effective Internet of Medical Things(IoMT) topology to Minimize the Maintenance and Deployment Cost”, Dr.D.Shanthi, Taylor and Francis Journals – Communicated(Scopus, WOS, SCI).

7. “Machine Learning based wireless Acoustic Communication with Enhanced Performance”, Dr.D.Shanthi, published in “Materials Today: Proceedings”, 2021, Science Direct, (Scopus, Elsevier).
8. “A Deep Learning Based Accident Detection System”, Dr.D.Shanthi, “The International journal of analytical and experimental modal analysis”, ISSN NO: 0886-9367, Volume XIII, Issue VI, June/2021, Page No: 867-873.
9. “Energy Efficient NoC design through Supervised Machine Learning”, Dr.D.Shanthi, published in “Journal of Computer and System Sciences”, 2020,SCI.
10. “Rectenna Integrated With Small Square Monopole Antenna with Inverted T-Shaped Notch for ISM Band Applications and it’s Data inNetworks,” D.Shanthi, Published in Adalya Journal, SCI and WebofScience (WOS),1301 2746-2020.
11. “Network Security Project Management,” D.ShanthiDr.R.Usha Rani Published Adalya Journal, SCI &WebofScience (WOS),ISSN:1301-2746 2020.
12. ”Automatic vehicle alert system,” D.Shanthi, Kiran Kumar, Lalitha Surya Kumari, Published in Jardcs Elsevier, ISSN: 1943-023x 2018. (SCI).
13. “Application of Machine Learning Techniques for Statistical Analysis of Software Reliability Data Sets,” D.Shanthi, Dr.R.K.MohanthyDr.G.Narsimha Published in International journal of pure and applied mathematics (Scopus), 2018.
14. “Hybridization of ACOT and PSO to Predict Software Reliability,” D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha Published in International journal of pure and applied mathematics (Scopus), 1314-3395, online versions 2018.
15. “Application of Swarm Intelligence Technique to predict Software Reliability,” D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha Published in IJPAM(Scopus) 1314-3395, online version 2018.
16. “Application Of Partical Swarm Intelligence,” D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha Published in IEEE, ISBN:978-1-5386-2745-7 2017.

17. “Survey on Learning Techniques on Neural Networks,” D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, Published in IJTES, Volume 3[8], pp: 4012-4014, August 2015.
18. “Human Intelligence Vs.ArtificialIntelligence: Survey,” D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, Published in IJECCE, 2249–071x, 2015.
19. “Recent Trends in Design Issues and Solutions for Regression Modeling,” D.Shanthi, S.KomalKaur, P.Samatha, Y.Prathima, Published in IJCCS, ISSN: 2277-6699,Vol-4, Issue-2 December- 2015.

List of Conference Papers Published Relevant to Topic Area:

1. D.Shanthi, ”Ensemble Approach of ACOT and PSO for Predicting Software Reliability” 2021 Sixth International Conference on Image Information Processing (ICIIP), IEEE, 26-28 November 2021DOI: 10.1109/ICIIP53038.2021.9702555(SCOPUS).
2. D.Shanthi, ”The Blue Brain Technology using Machine Learning”, 6thInternational Conference on Communication and Electronics Systems(ICCES), Coimbatore,IndiaISBN:978-1-6654-3587-1, DOI: 10.1109/ICCES51350.2021.9489075, Publisher: IEEE, 2021(SCOPUS)
3. D.Shanthi, ”Energy Efficient NoC design through Supervised Machine Learning”, Journal of Physics, Conference Proceeding by IoP Press, CONSILIO 2021-SIET, 2021, (SCOPUS)
4. D.Shanthi, “Credit Score Prediction System using Deep Learning and K-Means Algorithms”, Journal of Physics, Conference Proceeding by IoP Press, CONSILIO 2021-SIET, 2021, (SCOPUS)
5. D.Shanthi “Spiking Neural Networks For Predicting Software Reliability”, International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS-2020), St.Josephs College of Engineering, pg no:155-163, 10-11, December 2020, ELSEVIER-SSRN Digital Library, Online Version.
6. D.Shanthi, “Machine Learning and its Techniques,” 3rd International Conference on Multidisciplinary Research Trends in Arts, Science, Engineering and Technology, ICMRTASET-2019”.

7. D.Shanthi, “IoT Based Medical Diagnosis Expert System,” International Conference on Computer Networks, Bigdata and IoT (ICCBI-2018)”, Springer, Vaigai College Of Engineering, 2018 (Scopus).
8. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Application Of Machine Learning Techniques For Stastical Analysis Of Software Reliability Data Sets,” International Conference On Intelligent Computing And Control Systems (ICICCS), Vaigai College Of Engineering, (SCOPUS), 2018.
9. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Hybridization Of ACOT And PSO To Predict Software Reliability,” International Conference On Inventive Computing Systems And Applications (ICICSA 2018), Inventive Research Organization (Thailand). Scopus Indexed) 2018.
10. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Application Of Partical Swarm Intelligence Technique To Predict Software Reliability,” ICCSCS, IEEE, Vaigai College Of Engineering, 2017.
11. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Neural Networks and Its Learning Techniques,” Iciems, Cjits, Warangal, 2014.
12. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Recent Trends in Design Issues And Solutions For Regression Modeling,” ICCSPCIT (2015), At Mrcet Hyderabad, 2015.
13. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Human Intelligence vs. Artificial Intelligence: Survey,” NCRTCST-15, CMRCET, 2015.
14. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Applications Of Machine Learning Techniques On Software Reliability,” Advanced Computing AndPattern Recognition Acpr 14, JNTU, Jagityal, 2014.
15. D.Shanthi, Dr.R.K.Mohanty, Dr.G.Narsimha, “Intelligent Techniques on Software Reliability,” Information Systems and Knowledge Engineering, MREC, 2013.

F. Achievements:

1. Received various awards including Young Scientist Award, Faculty for Outstanding Research Award, and more.
2. Published several books and book chapters.
3. Presented and published numerous research papers in reputed journals and conferences.
4. Holds US, UK, Australian, and Indian patents.
5. Received copyrights for various projects.
6. Serves as an editorial board member and reviewer for several journals.
7. Supervising Ph.D. scholars and published papers with students.
8. Organized and participated in various workshops, conferences, and FDPs.
9. Active member in professional bodies like IEEE, CSI, IAENG, and others.
10. Played a pivotal role in shaping the curriculum for autonomous education.
11. Collaborated with industry experts and academia to incorporate cutting-edge technologies.
12. Ensured alignment with industry demands and emerging trends in the field.