SRI VENKATESWARA UNIVERSITY COLLEGE OF ENGINEERING::TIRUPATHI
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Dr.N.Usha Rani has been working as an Associate Professor, Department of Computer Science and Engineering, Sri Venkateswara University College of Engineering, Tirupati, Andhra Pradesh. She has 16 years of teaching experience. Her areas of interests are Machine Learning, Deep Learning, Fuzzy Logic, Genetic Algorithms Data Mining, Big Data Analytics. She has been awarded with PhD degree in School of Computer and Information Sciences, *University of Hyderabad*, Hyderabad, Telangana, India. She did M.Tech in the specialization of Artificial Intelligence in *University of Hyderabad*, Hyderabad, Telangana, India. She published several papers in reputed national and international journals with high impact factor. She attended and presented many research papers in various National and International conferences. She has served as a Resource person by giving lectures on Artificial Intelligence, Fuzzy Logic, Machine Learning, Artificial Neural Networks etc., in various Engineering Colleges. She has been guiding B.Tech students in their academic

project work. She has been giving research guidance to M.Tech and Ph.D students. She is serving as a Member of BOS (UG&PG), CSE, SVUCE, Tirupati.

Research Qualification, Ph.D./ M. Tech

Research Qualification	Specialization	Name of the Research Supervisor	Title of the Project	University/
M.Tech	Artificial Intelligence	Prof. P.N.Girija, Dept of Computer and Information Sciences, University of Hyderabad, Hyderabad	Effect of Speech Rate in Speech Recognition	**University of Hyderabad**
Ph.D	Computer Science	Prof. P.N.Girija, Dept of Computer and Information Sciences, University of Hyderabad, Hyderabad	Modeling and Analysis of Speech Rate Variation for Speaker Independent Telugu Automatic Speech Recognition System	**University of Hyderabad**

S.NO	PAPERS PUBLISHED IN JOURNALS
1.	K Nirmala, **N Usha Rani**, "Machine Learning Approaches for Sensor Data", International Research Journal of Modernization in Engineering Technology and Science, Vol 5, Issue 12, pp. 2574-2578, 2023.
2.	Dr.A.Sudhakaraiah, N.saradhi, **Dr.N.Usha Rani**, "Split Perfect Even Vertices Dominating Set of an Interval Graph using an Algorithm", in the Journal of STRAD RESEARCH, Vol 10, Issue 12, pp.361-387, 2023
3.	K Nirmala, **N Usha Rani**, "Design and Implementation of a Server Independent Three Level Authentication System", Journal of Advanced Zoology, Vol 44, Issue 4, 2023. .(**Scopus**)
4.	Dagada Madhu Sudhan Reddy and **N.Usha Rani,** "A Comparative Analysis of Machine Learning Models for Crop Recommendation in India", Revue d'Intelligence Artificielle (RIA), Vol 37, Issue 4, 1081-1090, 2023. .(**Scopus**)
5.	**Dr.N.Usha Rani** and K.Sravya, "TRACKING OF DRIVER ACTIVITY USING DEEP LEARNING", INTERNATIONAL JOURNAL OF NOVEL RESEARCH AND DEVELOPMENT, Vol8, Issue 9,pp. a231-a240, 2023.

6.	**Dr. N. Usha Rani,** and S R S Vaishnavi, "Smart Surveillance and Alert System, TIJER-International Research Journal, Vol 10, Issue 4, 2023.
7.	**Dr. N. Usha Rani,** and CH Meghana Reddy, "Efficient Gender Detection using Deep Convolution Neural Networks", International Research Journal of Modernization in Engineering Technology and Science, Volume 5, Issue 5, pp 73-80, 2023.
8.	**Dr.N.Usha Rani,** Shaik Shahid Akram, Shaik Danish Anjum, Kokkula Vishal,Narra Hemanth Reddy, "Repository and Retrieval of Data using AES Security in Cloud Computing Environment", International Journal for Research in Applied Science & Engineering Technology (IJRASET) Vol 11, Issue 4,pp 4224-4229, 2023.
9.	**Dr.N.Usha Rani,** Ale Anil Dr.N.Usha Rani , Puvvadi Kavya, Shaik Afroze Sulthana , A.V Mahvith, Shaik Sohail, "Crop Prediction using PySpark" , International Journal for Research in Applied Science & Engineering Technology (IJRASET), Vol 11, Issue 4,pp:4298-4302, 2023.
10.	C Venkata Sudhakar, G Umamaheswara Reddy, **N Usha Rani**. "Delineation and evaluation of the captive limestone mining area change and its influence on the environment using multispectral satellite images for industrial long-term sustainability", Journal of Cleaner Engineering and Technology, Vol 10, 2022(**Elsevier)**
11.	C Venkata Sudhakar, G Umamaheswara Reddy**, N Usha Rani.** In situ measurement and management of soil, air, noise and water pollution in and around the Limestone mining area of Yerraguntla, YSR kadapa, Andhra Pradesh, India for the sustainable development", Vol 14, Issue 3, pp, 746-761, 2022.(**Scopus**)
12.	**Dr. N. Usha Rani,** and Medidha Pravallika, "Facial Micro-Expresssion Recognition for Recommended Music", Journal of Design Engineering, ISSN:0011-9342, Issue:8, pp:26-34, 2021
13.	**Dr. N. Usha Rani,** V Sai Vivek, P. Tejo Sahithi and P. Rishika, **"**Analysis of Temperature, Pressure and Wind Speed Using HADOOP", Journal of Emerging Technologies and Innovative Research(International Open Access Journal) , Vol 5, Issue12/263. December 2018
14.	**Dr. N. Usha Rani** and T. Vanaja, "Data Minining Approach to Analyze the Road Accidents in India", International Journal of Computer Science and Engineering, JCSE, Issue-10, October 2018 E-ISSN 2347-2693
15.	**Dr. N. Usha Rani** and K.Manikantan, "SGB ADMINISTRATORS AND THEIR ALGORITHMS EMBEDDED WITHIN MYSQL, International Journal of Research and Analytical Reviews (IJRAR) Vol 5, Issue 4 , October 2018, E-ISSN 2348-1269 P-ISSN 2349-6138.
16.	**Dr. N.Usha Rani**, C. Srinivasulu and etal., "Find Intruder Application for Smartphone", International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC), Vol.5 Issue 4, :297-301, April 2017. ISSN 2321-8169

17.	**N.Usha Rani** and G. Srinivasulu, "Model Based Decision Trees for Document Approach in Data Filtering", International Journal of Innovative Technologies, Vol. 04, Issue 20, pp:3840-3843, December 2016. ISSN 2321-8665
18.	**N. Usha Rani** and Y. Ramya Krishna, "Smartphone Application for Health Care", International Journal of Scientific Engineering and Technology Research (IJSETR), Vol 04, Issue 09, pp: 1712-1715, April 2015. ISSN 2319-8885
19.	**N. Usha Rani** and Y. Ramya Krishna, **"**Overview of Android for User Applications**"**, International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC) Vol: 2 Issue: 11, pp: 3722-3725, November 2014, ISSN: 2321-8169.
20.	**N.Usha Rani** and P.N.Girija, "Error Analysis to Improve the Speech Recognition Accuracy on Telugu Language", Journal of *Sadhana,* Indian Academy of Sciences Vol. 37, Part 6, pp. 747–761, December **2012. (ISSN No: 0256-2499 (print) & ISSN No: 0973-7677 (electronic) --- Indexed in Scopus (2012 impact factor 0.393)** Sadhana (Impact Factor: 0.39). 37(6). DOI:10.1007/s12046-012-0109-x
21.	M. Rekha and **N. Usha Rani**, "Efficient Extraction of Frequent Elements from XML Document Using XML Tree Pattern Matching", International Journal of Advance Research in Computer Science and Management Studies, Volume 2, Issue 3, March 2014. **ISSN: 2321-7782 (Online); ISRA Impact Factor is 1.473 (2013), Scientific Journal Impact Factor is 4.739 (SJIF-2013);Index Copernicus Value is 3.5 (2012)**
22.	M.Swapna and **N. Usha Rani, "**Document Retrieval by Using Fuzzy Keyword Search in XML Data", International Journal of Advance Research in Computer Science and Management Studies, Volume 2, Issue 3, March 2014. ISSN: 2321-7782 (Online); ISRA Impact Factor is 1.473 (2013), Scientific Journal Impact Factor is 4.739 (SJIF-2013) ;Index Copernicus Value is 3.5 (2012).
23.	**N. Usha Rani** and P.N.Girija, "Analyzing and Correction of Errors to Improve the Speech Recognition Accuracy for Telugu Language", CiiT International Journal of Artificial Intelligent Systems and Machine Learning", June **2011 Print: ISSN 0974 – 9667 & Online: ISSN 0974 – 9543 (impact factor 1.261**)
24.	**N.Usha Rani** and P.N.Girija, "Effect of Speech Rate on the Speech Recognition Accuracy: A Review", CiiT International Journal of Artificial intelligent Systems and Machine Learning, Vol 2, pp: 251-258, Oct **2010**. **Print: ISSN 0974 – 9667 & Online: ISSN 0974 – 9543 (impact factor 1.261)**

	International Conferences
1.	Dr. N.Usha Rani, Mamatha, Sai "Braiǐ Tumor Detectioǐ usinDž Convolutioǐ NeuraǍ Networks", proceedings of One Day International Conference On Statistical Applications For Data Science, Social, Biological, Medical, Agricultural, Management, Engineering, Mathematical And Computer Sciences, on february 17th 2023, Dept Of Statistics, Sri Venkateswara University, Tirupati, Andhra Pradesh, INDIA.(**Best Paper**)
2.	C Venkata Sudhakar, Umamaheshwara Reddy, Usha Rani, "Delineation of the Captive Limestone Mine Boundaries Using Multispectral Satellite Images Through the Use of NDVI and Google Earth Image Template Matching", Proceedings of the International Conference on Innovative Computing & Communication (ICICC) 2022/4/23
3.	D Madhu sudhan Reddy, N Usha Rani, "Bird's Eye View of Machine Learning, Deep Learning in Agriculture", Proceedings of the 2nd Indian International Conference on Industrial Engineering and Operations Management Warangal, Telangana, India, August 16-18, 2022
4.	**N. Usha Rani** and G.Gowthami, *"Smart Crop Suggester"*, In the proceedings of International Conference on Computational and Bio-Engineering(CBE'19), 27th & 28th December 2019.Organized by Departments of Computer Science, Bio Sciences & Sericulture, Sri Padmavathi Mahila Visvavidyalayam(Women's University), Tirupati.
5.	**N. Usha Rani,** S. Noor Ahmad, C. Hari Kumar Reddy and P. Jaya Lakshmi, "Honey Maze Encryption (HOME), In the proceedings of International conference on Universal Computing, Communications and Data Engineering (CCODE-2018), February 7-8, 2018 organized by Department of Computer Science, Sri Padmavathi Mahila Viswavidyalayam (Women University), Tirupati. Available at SSRN: https://ssrn.com/abstract=3173517 or http://dx.doi.org/10.2139/ssrn.3173517
6.	**N.Usha Rani** and P.N.Girija, "Reduction of Confusion Pairs on Difference Rates of Speech in Telugu Language", In the Proceedings of 15th International Conference on Advanced Computing Technologies (ICACT-2013), 21-22 September, 2013 (IEEE Digital Library IEEE XPlorer) DOI: 10.1109/ICACT.2013.6710544
7.	**N.Usha Rani** and P.N.Girija, "Error Analysis and Improving the Speech Recognition Accuracy on Telugu Language", Proceedings of Third International Conference on Advances in Communication Network and Computing –, LNICST pp. 301–308, CNC 2012, Feb 24-25, 2012
8.	**N.Usha Rani** and P.N.Girija, "Statistical Modification Method for Speech Recognition System Results", Proc. of International Conference on Advances in Mathematical & Computational Methods, Vol 1, pp:200-203, jan5-7, 2011, Department of Computer Science, Sri Padmavathi Mahila Viswavidyalayam (Women University), Tirupati.

	National Conferences
1	**N. Usha Rani** and G. Srinivasulu, "Comparison of Telugu Speech Recognition Accuracy among the Male and Female Speech" In the proceeding of National Conference on Advances in Computational Intelligence and Computer Engineering" ACICE-2013, 23rd and 24th October 2013.
2	**N.Usha Rani**, M. Rekha and M. Swapna, **"Efficient Algorithms for Generating Association Rules in Data mining: A Survey"**, In the Proceedings of National conference of IITE2K13 April 20-22, **2013.**
3	**N.Usha Rani** and P.N.Girija, "Modification of Pronunciation Dictionary to Improve the Speech Recognition Accuracy for Telugu Railway Enquiry System", Proc. of National Conference on Computing & Communication Technologies, pp:158-162, 6th and 7th October, **2010.**

As a Research Guide:

PhD : 02 (on going)

M.Tech : 05 (on going)

No of M.Tech Students guided: 19

SNo	Reg No	Name of the Student	Title of the Project	Academic Year
1.	1120624	K.Sravya	Tracking of Driver Activity using Deep Learning	2022-23
2.	1120604	CH Meghana	Effficient Gender Detection Using Deep Convolution Neural Networks	2022-23
3.	1120614	SRS Vaishanavi	Smart Surveillance and Alert system	2022-23
4.	1119620	M.Pravallika	Facial Micro-Expression Recognition for Recommanded Music	2020-21
5.	1117606	G.Gowthami	Smart Crop Suggester	2019-20
6.	1117614	T.Sai Kumar	Agro Shopping and Agro Predict	2019-20

7.	1117623	K.Navya	Automated Rainfall Amount Classification System	2019-20
8.	1116607	K.Manikantan	Data Mining:Similarity Group By Operations for Multi-Dimentional Data	2018-19
9.	1116615	T.Vanaja	Data Mining Approach to Analyze the Road Accidents in India	2018-19
10.	1116618	U.Madhoolika	Human Heart Disease Prediction System Using Data Mining Techniques	2018-19
11.	1115605	G. Juhi Sulthana	Nearest Location Search Using Keyword on XML Spatial Data	2016-17
12.	1115611	V.Suhasini	Progressive Deduplication in anomaly detection of job applications	2016-17
13.	1112616	Y. Ramya Krishna	Smart Phone Application for Health care	2012-14
14.	1111607	M. Rekha	Efficient Extraction of Frequent Elements from XML Document through Hoard in XML Tree Pattern Matching	2011-13
15.	1111609	M. Swapna	Efficient XML Document Retrieval through Ranking using NRA Algorithm	2011-13
16.	1110610	N. Jaya Krishna	Efficient Techniques for Mining Association Rules- A Comparative Study	2010-12
17.	1108616	Y.P. Narasa Reddy	Applying Rule Schema to Reduce Number of Association Rules in Post Mining	2011-12
18.	1107606	G. Srinivasulu	Improving the Accuracy for Construction of Decision Tree on Uncertain Data	2011-12
19.	1106606	J. Nagamunaih	Extracting Actionable Knowledge from Decision Trees for n-class Problems	2010-11

Administration work
As a Member of Board of Studies (**BOS**) in the CSE department, SVUCE.
As a **NBA** coordinator in CSE department, SVUCE
As a member for scrutinizing the applications of Backlog vacancies reserved for Physically Handicapped in SVU
As a Member in Inspection Committee to SVU affiliated Colleges
As a PG Coordinator in CSE, SVUCE
As a in charge for Examination Scheduling in the CSE department in SVUCE
As a in charge for CSE Department Library (Book Club) in SVUCE
As a Timetable coordinator in CSE department, SVUCE.

15.   Address for Communication   : Dr. N.Usha Rani,
       e-Mail / Telephone / Mobile of the   Associate Professor,
        Teacher   Department of   CSE,
                                                    S.V.U College of Engineering,
                                                    Tirupati – 517 502.

                                                    email:usha552@yahoomail.com
                                                    Mobile No: 9493564899

Station : Tirupati

                                                                SIGNATURE

Date :