

## FACULTY PROFILE



<b>NAME:</b>	USHA RANI BAJJURI
<b>DESIGNATION:</b>	Sr. ASSISTANT PROFESSOR
<b>AREAS OF RESEARCH:</b>	Machine Learning, Edge Computing & Federated Learning
<b>ORCID:</b>	0000-0002-6685-280X
<b>Scopus:</b>	58196609100
<b>Vidwan:</b>	205719
<b>Blog</b>	<a href="https://usharanibajjuri.blogspot.com/">https://usharanibajjuri.blogspot.com/</a>
<b>EMAIL:</b>	bajjuri.usarani2022@gmail.com
<b>PHONE:</b>	+91-9492270654

### EDUCATION:

- Awarded **M. Tech Degree** in CSE from **P.V.P Siddhartha institute of Technology** in the year **2015**.
- Awarded **B. Tech Degree** in CSE from **D.M.S.S.V.H College of Engineering** in the year **2012**.

### WORK EXPERIENCE:

- Present working as **Assistant Professor** in **CSE Department of Lakireddy Bali Reddy College of Engineering(A), Mylavaram (P), Krishna (D)** (From **28<sup>th</sup> August** to till **Date**).
- Worked as **Assistant Professor** in **CSE Department of DVR&Dr.HS MIC College of Technology, Kanchikacherla, Krishna (D)** (June **15<sup>th</sup>** to August **24<sup>th</sup>**)

### PROFESSIONAL ACTIVITIES:

## **PUBLICATIONS:**

### **● JOURNALS:**

- 1. Enhancing Non-Alcoholic Fatty Liver Disease Prediction with Machine Learning and Recursive Feature Elimination**, International Journal of Environmental Sciences VOL. 11 NO. 8 (2025), 2025-09-20. Q3  
<https://theaspd.com/index.php/ijes/article/view/10066>
  
- 2. “A deep learning framework for ECG Arrhythmia classification using GAM-ResNet18 and Namib beetle optimization-based domain adaptation”**  
International Journal of Advanced Technology and Engineering Exploration. 2025; 12(126):803-818, ISSN (Print): 2394-5443 ISSN (Online): 2394-7454, Volume-12 Issue-126, May-2025, DoI: <https://accentsjournals.org/paperinfo.php?journalPaperId=1794>  
Q3, H-Index 15, Impact Factor: 0.245
  
- 3. “Wielding Neural Networks to Interpret Facial Emotions in Photographs with Fragmentary Occlusions”**, Fusion: Practice and Applications( H-Index:8, Q4, Impact Factor:0.15), K. Anji Reddy , K. Sivarama Krishna , B Prakash Battula , **B. Usha Rani** , P. V. V. S. Srinivas , **Vol. 17**, Issue-1, Pg.No: 146-158, Aug-24, ISSN (Online):2692-4048, ISSN (Print):2770-0070.  
<https://doi.org/10.54216/FPA.170111>
  
- 4. “Advancements in Deep Learning Techniques for Potato Leaf Disease Identification Using SAM-CNN Classification”**, Shruti P, Anusuya Devi V Satya, **B. Usha Rani**, Pramodh Krishna D, Manohar M, Aruna devi T, Ramesh V, Ingénierie des Systèmes d’Information (ISI), Vol. 29, Issue: No. 5, Oct-24, pp. 2021-2030, ISSN: 1633-1311 (print); 2116-7125 (online).  
<https://doi.org/10.18280/isi.290533>
  
- 5. "An Enhanced Early Detection and Risk Prediction Of Brain Tumors Using Mri-Ct Scans With Deep Learning Technique”**, Dinesh Valluru, K. Varada Raj kumar, Praveen Kumar K, **B. Usha Rani**, Dr. E. Sreedevi, J V Rama Kumar, Pradeep J, Dr. Siva Kumar P, Journal of Theoretical and Applied Information Technology, Vol.102, pg.no: 21, 45597, 15th November 2024, ISSN: 1992-8645/E-ISSN: 1817-3195.  
<http://www.jatit.org/volumes/Vol102No21/16Vol102No21.pdf>
  
- 6. "Re-Ranking of Images Using Semantic Signatures with Queries"**, B. Usha Rani and M.V.S.N.Maheswar, International Journal of Computer Sciences and Engineering

(IJCSSE), Volume-03, Issue-10, Page No (71-75), October -2015,  
2347-2693.

E-ISSN:

7. **“Privacy and Preserving Cloud Data Distribution using Cloud Key Bank”**, B.Usha Rani and K.Vinaya Sree Bai, International Journal of Research in Computer Science & Engineering (IJRSCE), Volume-6, Issue-6, Nov - Dec, 2016, ISSN: 2321-5585.
8. **“Human Relationships Analytics based on Social Networks”**,B.Usha Rani, K.Vinaya Sree Bai, Dr Pamidi Srinivasulu and Mr R Venkat, Institute of Electrical and Electronics Engineers (IEEE), 2017.

● **CONFERENCE:**

1. **“An Enhanced Microarray Sample Classification Using Machine Learning “**, 2024 5th International Conference for Emerging Technology (INCET), **B. Usha Rani; G Bhavana; Sravya V**, Date of Conference: 24-26 May 2024/Belgaum, India, "Electronic ISBN:979-8-3503-6115, Print ISBN:979-8-3503-6116-2. DOI:[10.1109/INCET61516.2024.10593084](https://doi.org/10.1109/INCET61516.2024.10593084)  
<https://www.scopus.com/authid/detail.uri?authorId=58196609100>
2. **“An Advanced Deep Learning Approach for Dietary Recommendations using ROBERTA “**,Mrs. **B. Usha Rani; T Joshnavalli; B Srikanth Reddy; A Sreelaasya**, 2024 4th International Conference on Intelligent Technologies (CONIT), 15-Aug-24, ISBN:979-8-3503-4990-0/979-8-3503-4991-7.<https://ieeexplore.ieee.org/document/10626573>
3. **"A Systematic Analysis of Deep Learning and Machine Learning Methods for Identifying Apple Leaf Disease,"** B Usha Rani, K. Pavani, S. Bhavani and G. Alapati,2023 4th International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, 2023, pp. 761-765, doi: 10.1109/ICESC57686.2023.10192948.
4. **“A Systematic Analysis of Deep Learning and Machine Learning Methods for Identifying Apple Leaf Disease,"** **B. Usha Rani**, K. Pavani, S. Bhavani and G. Alapati, 2023 4th International Conference on Electronics and Sustainable Communication Systems (ICESC), Coimbatore, India, July-2023, pp. 761-765,979-8-3503-0009-3doi:10.1109/ICESC57686.2023.10192948.  
<https://ieeexplore.ieee.org/document/10192948>
5. **Gridlock Prediction using a Gated Recurrent Neural Network for Smart Transport Systems, B. Usha Rani; Shaik Sameena Sulthana; Prajapati Krishna Kumar; Ponnuri Bhavana**, 7th International Conference on Computing Methodologies and Communication (ICCMC), held at Erode, India, 23-25 February 2023, ISBN:978-1-6654-6409-3. <https://ieeexplore.ieee.org/document/10084275>

6. **An AI enabled IoT model to automate Shrimp culture**, B.Usha Rani,T.L. Deepika Roy, Katta Subba Rao,Venubabu Rachapudi, AIP Conference Proceedings,2477,May-2023, 0094-243X, <https://doi.org/10.1063/5.0125544>
7. Sri Hari Nallamala, Usha Rani Bajjuri, Sarvani Anandarao,Dr. D. DurgaPrasad and Dr. Pragnaban Mishra, “A Brief Analysis of Collaborative and Content Based Filtering Algorithms used in Recommender Systems”, IOP Conf. Series: Materials Science and Engineering 1757-8981,Dec-2020.
8. Attended 3<sup>rd</sup> International Conference on Computer &Communication Technologies (IC3T) from 5<sup>th</sup> to 6<sup>th</sup> November,2016 organized by CSE in DVR&Dr. HS MIC College of Technology.

● **PATENTS:**

1. “Machine Learning –Based Adaptive Framework for Enhancing EFL Learners’ Reading Skills in Higher Education” has been published in October,205 :Application No.202541093228A
2. “SMART IOT BASED SYSTEM FOR HOME AUTOMATION SYSTEM”has been published in June, 2022 : Application No.202241032949
3. "A Novel Global Secure Management System with Smart Card for IoT and Cloud Computing" has been published in Feb,2021 : Application No.202141000635 A.

● **Book Chapters:**

**1.”Gesture Driven AI Virtual Mouse: Revolutionizing Human Computer-Interaction with Computer”**GRENZE Publisher in July-2025-ISBN:2395-5295(Online); 2395-5287(Print)

<https://thegrenze.com/index.php?display=page&view=journalabstract&absid=4409&id=8>

**2.”Artificial Intelligence, Digital Payment Systems, and Financial Inclusion: Revolutionizing Retail and Beyond”** Rchub publisher in Nov-2024-ISBN: 978-81-972363-8-9 <https://rchubpublisher.com/artificial-intelligence/>

● **CERTIFICATIONS:**

- Got certified from NPTEL online certification course (12 Weeks) on “Blockchain Technology” conducted by IIT Kanpur in the year 2025.

- Got certified from JNTU-GV online certification 40 hours course on “Machine Learning& Deep Learning" conducted by JNTU-GV in the year 2025.
- Got certified from NPTEL online certification course (8 Weeks) on “Cloud Computing" conducted by IIT Kanpur in the year 2024.
- Got certified from NPTEL online certification course (8 Weeks) on “Research Methodologies in Natural Sciences " conducted by IIT Kanpur in the year 2024.
- Got certified from NPTEL online certification course (8 Weeks) on “Research Methodology" conducted by IIT Kanpur in the year 2024.
- Got certified from NPTEL online certification course (8 Weeks) on “Industrial IoT" conducted by IIT Kanpur in the year 2023.
- Got certified from NPTEL online certification course (8 Weeks) on “Accreditation and Outcome Based Learning " conducted by IIT Kanpur in the year 2021.
- Got certified with Elite from NPTEL online certification course (8 Weeks) on “Big Data Computing" conducted by IIT Kanpur in the year 2020.
- Completed Online Course and received a passing grade in “AI For Everyone”, through Coursera.
- Completed Online Course and received a passing grade in “Introduction to IOT and Embedded Systems”, through Coursera.
- Got certified with Elite from NPTEL online certification course (12 Weeks) on “Problem solving through programming in C" conducted by IIT Kharagpur in the year 2018.

**WORKSHOPS/FDPs/Webinars ATTENDED:**

1. Attended 40-hours Online Faculty Development Programme On “Quantum Communication” from August 18 to September11,2025 conducted by Electronics&ICT Academies,MNIT Jaipur,NIT Patna, IIT Kanpur,IIT Guwhati,IITM Jabalpur in the year 2025.

2. Attended 40-hours Online Faculty Development Programme On “Machine Learning& Deep Learning” from 06.10.2025 to 27.10.2025 organized by Department of Computer Science and Engineering, JNTU-GV ,Vizianagaram in 2025.
3. Attended and completed the Faculty Orientation Program conducted by Wadhvani Foundation on 21st Century Employability Skills Course in the October,2025.
4. Participated in 12 week Faculty Development Program on “Blockchain and its Applications” conducted by IIT Kharagpur in the year 2025.
5. Attended One Week Online Faculty Development Programme On Emerging Frontiers in AI: From Data Science to Generative AI and its Applications from 09.12.2024 to 13.12.2024 organized by Department of Computer Science and Engineering, Andhra Loyola Institute of Engineering and Technology -Vijayawada.
6. Participated in 12 week Faculty Development Program on “Cloud Computing” conducted by IIT Kharagpur in the year 2024.
7. Participated in 12 week Faculty Development Program on “Research Methodologies in Natural Sciences” conducted by IIT Kharagpur in the year 2024.
8. Participated in 12 week Faculty Development Program on “Industrial IoT 4.0” conducted by IIT Kharagpur in the year 2024.
9. participated in “A Fifteen Day Short Term Online Course on Emerging Research Trends in Computer Science and Engineering ” during 26th June to 10th July-2023 at JNTU-GV,Vizianagaram.
10. Participated in the AICTE Recognized Faculty Development Programme on Wireless Networks Conducted by Computer Science and Engineering Department from 26/09/2022 to 30/09/2022 (Except 30/09/2022) at NITTTR, Chandigarh
11. the successful completion of One week Faculty Development Program on"Amazon Web Services", from 22nd August 2022 to 27th August 2022 organized by SRIDEVI WOMEN'S ENGINEERING COLLEGE, HYDERABAD

in collaboration with BRAINOVISION SOLUTION INDIA PVT.LTD & ALL INDIA COUNCIL FOR TECHNICAL EDUCATION-AICTE.

12. participated in the “2nd One Week International Workshop on Signal Processing using Machine Learning: Applications & Hands-on (Online)”, organized by the School of Electronics Engineering (SENSE), VIT-AP University, Amaravati (AP), India, Technically sponsored by MathWorks, IEEE Guntur Subsection, and IEEE VIT-AP Student Branch during 31st August to 6th September, 2022
13. participating in the One Week Online Faculty Development Program on “Research Methodology & IPR” organized by IQAC, IIC & Department of Computer Science and Engineering, VRSEC under AICTE Margdarshan during 13th - 17th September, 2021.
14. participated in One Week National Level Online Faculty Development Program(FDP) on "Recent Trends in Artificial Intelligence, IoT, and Data Analytics” organized by the Department of Computer Science & Engineering of Shri Vishnu Engineering College for Women(A) from 9-13, February 2022.
15. Attended a AICTE Training And Learning(ATAL)Academy Online Elementary FDP on "Data Science & Its Applications" from 6th to 10th December, 2021 at Lakireddy Bali Reddy College of Engineering(A),Mylavaram .
16. Attended a weninar Jointly Organized by Internal Quality Assurance Cell (IQAC)and Science City of Andhra Pradesh, Govt. of AP, on “National Education Policy (NEP) 2020 - Technology Use andIntegration” on 12th June 2021 at Lakireddy Bali Reddy College of Engineering(A),Mylavaram .
17. Attended a one-week AICTE-AQIS Sponsered STTP on “Sensor Networks, Internet of Things and Internet of Everything”organized by Department of Computer Science and Engineeringfrom 03rd to 08th May, 2021 AT St.MARTINS Engineering College,Secunderabad.
18. Attended a one-week AICTE Sponsered STTP on “Machine Learning and Deep Learning Techniques for Artificial Intelligence Problems using Python-series-II” from 14th to 19th December ,2020 organised by Department of IT at VNRVJIET,Hyderabad .

19. Attended a one-week AICTE Sponsered STTP on “Machine Learning and Deep Learning Techniques for Artificial Intelligence Problems using Python-series-I” from 16th to 21st November ,2020 organised by Department of IT at VNRVJIET,Hyderabad .
20. Attended a two-week FDP on “Professional Morals,Work Ethics& Accountability for Teachers in Technical Education” from 19th to 31st October ,2020 organised by Department of CSE at VR Sidhartha Engineering College .
21. Attended a one-week STTP on “Deep Learning” from 5th to 9th October ,2020 organised by APSSDC .
22. Attended a one-day webinar on “Machine Learning and It's Applications” on 7th October ,2020 organised by APSSDC .
23. Attended a National level 2-day FDP on “Open Source Tools &Software for Online Teaching” from 8th to 9th June ,2020 at RISE Krishna Sai Prakasam Group of Institutions.
24. Attended a one- day Webinar on “ICT Tools and Innovative Practices in Education” on 10th June, 2020 at Vikas College of Engineering and Technology.
25. Attended one-week STTP on “Deep Learning For Image and Text Analysis”, from 26th to 31st August, 2019 at DVR&Dr. HS MIC College of Technology, Kanchikacherla.
26. Attended a one-day workshop on “Value Based Education System” in 2016 at DVR&Dr. HS MIC College of Technology, Kanchikacherla.
27. Attended a 2-day work shop on “Multi-Disciplinary Research Challenges and Trends in Computer Science” from 5th November to 6th November,2016 at DVR&Dr. HS MIC College of Technology, Kanchikacherla.
28. Attended a one-day workshop on “Research Guidelines & Methodologies” on 31st October ,2016 at DVR & Dr. HS MIC College of Technology, Kanchikacherla.

● **MEMBERSHIPS IN PROFESSIONAL SOCIETIES:**

- 1) Professional Member (Since 2023 ) of Association for Computing Machinery(ACM)-7796806
- 2) Member of Institute of Research Engineers and Doctors (IRED)AM101000583309
- 3) Life member of International Association of Engineers (IAENG) - 229670
- 4) Member of Computer Science Teachers Association (CSTA).