Curriculum Vitae

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Dr. RAMBABU PEMULA   Mail: **rpemula@gmail.com**

B.Tech. (CSE)   Mobile: +**91 9849482644**

M.Tech. (S.E)

Ph.D. (CSE)

UGC-NET (CS&A)

APSET – CS&A

Teaching Experience**: 15+ years**

Blog: https://machinelearningadda.blogspot.com/

Google Scholar: https://scholar.google.co.in/citations?user=Ta42hlQAAAAJ&hl=en

Scopus:https://www.scopus.com/authid/detail.uri?authorId=57189715086

Orcid: https://orcid.org/0000-0002-6565-2822

Web of science: https://www.webofscience.com/wos/author/record/AAV-4547-2020

Vidwan: https://vidwan.inflibnet.ac.in/profile/212733

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Educational Qualifications:

- **Ph.D (CSE)** from Jawaharlal Nehru Technological University, Kakinada in 2020.
- **M.Tech (SE)** from VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad / JNTU Hyderabad in 2007.
- **B.Tech (CSE)** from Jaya Prakash Narayan College of Engineering, Mahaboob Nagar / JNTU Hyderabad in 2003.
- **Intermediate** from Vidyaranya Jr. College, Warangal /Board of Intermediate, Andhra Pradesh in 1999.
- **SSC** from Andhra Pradesh Residential School, Ganapavaram, Prakasam (Dt), Andhra Pradesh, /Secondary School Certificate, Andhra Pradesh in 1996

WORK EXPERIENCE:

1. Working as Associate Professor in Department of Artificial Intelligence, Vidya Jyothi Institute of Technology, Hyderabad from 12-07-2023 to till date.
2. Worked as Associate Professor in Computer Science & Engineering Department, RAGHU Engineering College, Visakhapatnam from 18-03-2021 to 30-06-2023.
3. Worked as Assistant Professor in Computer Science & Engineering Department, RISE Krishna Sai Prakasam Group of Institutions, Ongole from 03-07-2017 to 03-03-2021.
4. Worked as Assistant Professor in Computer Science & Engineering Department, Vidya Jyothi Institute of Engineering & Technology, Ongole, from 07-07-2009 to 28-02-2017.
5. Worked as Assistant Professor in Computer Science & Engineering Department, Vathsalya Institute of Science & Technology, Bhongiri, Andhra Pradesh, India, from 08-09-2007 to 24-06-2009.

ACHIVEMENTS:

- Qualified **UGC NET – 2018** as **Assistant Professor** in **Computer Science & Applications**
- Qualified **APSET – Assistant Professor/ Lectureship 2013** in **Computer Science & Applications**

- Qualified in **GATE - 2012** in Computer Science & Engineering
- Qualified in **GATE - 2005** in Computer Science & Engineering

Professional Affiliation:
- Life Member **ISTE** (LM 69594)

Ph.D. Supervision:

1. **BABU BULLA**, "Intrusion Detection- Machine Learning" Ongoing – **JNTUK, Kakinada, 2021-22**

PUBLICATIONS:

Accepted:

1. **Rambabu Pemula**, et al., "Short Text filtering on Social Networking and Text Classification using Machine Learning Techniques" *International Journal of Integrated Engineering* (**SCOPUS Indexed**)
2. **Rambabu Pemula**, et al., "Real Time Face detection and Verification by Deep Learning Feature Extraction Techniques" *Journal of Artificial Intelligence and Soft Computing Research* (**SCI Indexed**).
3. **Rambabu Pemula**, et al., "A Hybrid Intrusion Detection System against Botnet Attack in IoT using Light Weight Signature and Ensemble Learning Technique" *Wireless Personal Communications,* doi.org/10.21203/rs.3.rs-905197/v1 (**SCI Indexed**).

Published:

1. **Rambabu Pemula**, et al., "Gene Expression Data Classification with Robust Sparse Logistic Regression using Fused Regularization" *Int. J. of Ad Hoc and Ubiquitous Computing* 2023 Vol.42 No.4, pp.281 - 291 **DOI**: 10.1504/IJAHUC.2023.10055696 ((**SCI Indexed Journal, Scopus Indexed**).
2. **Rambabu Pemula**, et al., "Intelligent Diagnosis System of Hepatitis C Virus: A Probabilistic Neural Network Based Approach" – *International Journal of Imaging Systems and Technology* (IMA) – Wiley 2022; 1- 30. doi: 10.1002/ima.22746 https://onlinelibrary.wiley.com/doi/abs/10.1002/ima.22746 Online ISSN:1098-1098 (**SCI Indexed Journal, Scopus Indexed**)
3. **Rambabu Pemula**, Sagenela Vijaya Kumar, C. Nagaraju "Generation of Random Fields for Image Segmentation Techniques: A Review" *International Journal of Image and Graphics* https://doi.org/10.1142/S0219467823500225 (**SCOPUS Indexed**) 1793-6756
4. **Rambabu Pemula**, et al., "Change Detection of Pulmonary Embolism using Isomeric Cluster and Computer Vision" *IAES International Journal of Artificial Intelligence (IJ-AI)* Vol. 11, No. 2, June 2022, pp. 787~798 ISSN: 2252-8938, DOI: 10.11591/ijai.v11.i2.pp787-798 (**SCOPUS Indexed**)
5. **Pemula, R**., Naga Raju, C. "Hash based manifold learning technique to generating random fields for image segmentation." *Cluster Computing* **22,** 14877–14888 (2019). https://doi.org/10.1007/s10586-018-2433-3 (**SCI Indexed Journal, Scopus Indexed**) (**Springer Publications**).

6. **Rambabu Pemula,** C. Naga Raju, "Generation of Random Fields for Image Segmentation using Manifold Learning Technique" ***International Journal of Pattern Recognition and Artificial Intelligence***, (2016) Vol 30. Issue 10. https://doi.org/10.1142/s0218001416540070 (**SCI Indexed Journal, SCOPUS Indexed**)**.**

7. **P.Rambabu,** C. NagaRaju, "Generation of Random Fields for Object Recognization using Binarization Technique", *International Journal of Emerging Trends & Technology in Computer Science (IJETTCS)*, Volume 4, Issue 5(2), September - October 2015, ISSN 2278-6856 (**UGC Referred Journal**).

8. N. Hanumantha Rao, A. Sri Nagesh, **P.Rambabu,** Dr. G.P. Saradhi Varma, "A New Digital Encryption Scheme: Sub areas Exchange Encryption Approach" *International Journal of Emerging Trends in Science and Technology IJETST,* Vol.2, Issue 2 Pages 1829-1835,February 2015, ISSN 2348-9480.

9. **P.Rambabu,** C. Naga Raju "The Optimal Thresholding Technique for Image Segmentation Using Fuzzy Otsu Method" *International Journal of Applied Engineering Research,* Vol.10, Issue 13, 2015, Pages: 33842-33846 (**SCOPUS Indexed, UGC Referred Journal, ICI**)

10. **Rambabu Pemula,** *et.al,* "Intelligent Model to Classify Cashew Kernels" *International Journal of Engineering and Innovative Technology (IJEIT)*, Volume 2, Issue 6, December 2012. ISSN: 2277-3754

11. **Rambabu P**, Akkisetty Sesha Giri, Kumar Jetti, Priya Jain "Query Optimization Using the Technique of Progressive Parametric" International Journal of Electronics Communication and Computer Engineering Volume 3, Issue (1) NCRTCST, ISSN 2249 –071X

12. **Rambabu Pemula**, Kumar Jetti, Srinivasa Rao Divvela, Devarapalli Anandam "Identifying Popular Items by Analysing Randomized Algorithms" has been published in *International Journal of Computer Applications in Engineering Science*, vol I, issue IV, December 2011 ISSN: 2231-4946

13. **Rambabu Pemula**, B.Shankar Naik, K. Surekha, Myla Satish Babu, " Supervised Learning – A Study on Mining with Unbalanced Dataset", *International Journal of Multidisciplinary Sciences and Engineering,* Vol 2, No. 8, November 2011, ISSN: 2045-7057

14. **Rambabu Pemula**, Kumar J, Praneeth S, "Framework to Measure and Maintain the Quality of Software using the Concept of Code Readability", has been published in *International Journal of Computer Technology and Applications,* Vol 2(5), Sept-Oct 2011, ISSN: 2229-6093.

15. **Rambabu Pemula**, Srinivasa Rao D, Bhupathi Sampath Babu, B Harikrishna, Neelima S, "Implementation of FS-DT Algorithm to Enhance the Performance of Decision Tree" has been published in *International Journal of Engineering Research and Applications (IJERA)*, Vol. 1 Issue 4, ISSN: 2248-9622.

16. Sarath Chand P.V, Balraju M, Bhukya Shankar Nayak, **Rambabu Pemula**, Suryaprakash G "Data Retrieval and Gaining Optimistic Nepotism Samples" International Journal of Information and Communication Technology Research. Volume 1 No. 3, July 2011 ISSN-2223-4985.pp 109-112.

Book Chapters/Conference Publications:
International:

1. **Pemula, R**., et al., (2023). Classification of High-Dimensionality Data Using Machine Learning Techniques. In: Bhateja, V., Sunitha, K.V.N., Chen, YW., Zhang, YD. (eds) Intelligent System Design. Lecture Notes in Networks and Systems, vol 494. Springer, Singapore. https://doi.org/10.1007/978-981-19-4863-3_22 (**SCOPUS Indexed**)

2. **Pemula, R.,** et al., (2022). Deep Learning Models for Identification of COVID-19 Using CT Images. In: Kumar, R., Ahn, C.W., Sharma, T.K., Verma, O.P., Agarwal, A. (eds) Soft Computing: Theories and Applications. Lecture Notes in Networks and Systems, vol 425. Springer, Singapore. https://doi.org/10.1007/978-981-19-0707-4_52 (**SCOPUS Indexed**)

3. **Rambabu Pemula** et al., "Student Cognitive Learning Capability (SCLC) Prediction System using PCA-ANN based Model" 2022 International Conference on Computing, Communication and Power Technology (IC3P), **DOI:** 10.1109/IC3P52835.2022.00013 **IEEE *Xplore*(SCOPUS Indexed**)

4. **Rambabu Pemula** *et al.,* "Using EM technique for Juvenile crime zoning" 2021 5ᵗʰ International Conference on Information Systems and Computer Networks (ISCON), GLA University, Mathura, India. Oct 22-23, 2021. **DOI: 10.1109/ISCON52037.2021.9702353 (Scopus Indexed**) (**IEEE Xplore Digital Library**).

5. **Rambabu Pemula** *et al.*, "Assessing the Relation between Family Background and Juvenile Delinquency using Data Mining," 2019 International Conference on Computer Communication and Informatics (ICCCI), Coimbatore, Tamil Nadu, India, 2019, pp. 1-4. **DOI: https://doi.org/**10.1109/ICCCI.2019.8822138 (**SCOPUS Indexed**) (**IEEE Xplore Digital Library**).

6. **Pemula R.**, Nagaraju C. (2019) "Generation of Random Fields for Image Segmentation Based on MRF Energy Level Set Method". In: Satapathy S., Bhateja V., Das S. (eds) Smart Intelligent Computing and Applications. Smart Innovation, Systems and Technologies, vol 104. Springer, Singapore DOI: https://doi.org/10.1007/978-981-13-1921-1_53 (**SCOPUS Indexed**) (**Springer Publications**)

7. **R. Pemula** and C. N. Raju, "Generation of optimal random fields for image segmentation using fuzzy multi-region technique," *2016 International Conference on Communication and Electronics Systems (ICCES)*, Coimbatore, 2016, pp. 1-6. **DOI: https://doi.org/**10.1109/CESYS.2016.7889832. (**SCOPUS Indexed**) (**IEEE Xplore Digital Library**).

National:

1. **Rambabu P,** Akkisetty Sesha Giri, Kumar Jetti, Priya jain, "Query Optimization Using the Technique of Progressive Parametric", *International Journal of Electronics Communication and Computer Engineering,* Vol 3, Issue 1, NCRTCST, ISSN: 2249-071X,

Patents:

1. Title: "A Secured Image Processing System of Biometric Based Automated Ration Distribution",
   - Patent Application No: 201941039689 A

- The Patent Office Journal No. 42/2019
- Dated 18/10/2019, Page No: 48853

Books Publication:

1. D. Sharadha Mani, C. Nagaraju, **Rambabu Pemula (2021)** "Facial Emotion Recognition for Decision Making", LAP LAMBERT Academic Publishing International, ISBN: 978-620-4-20937-1.
2. U.Seshadri, C. Nagaraju, **Rambabu Pemula** (2021), "Image Enhancement and Segmentation using Soft computing Techniques", LAP LAMBERT Academic Publishing, ISBN: 978-620-3-92998-0
3. S. Vijaya Kumar, **Rambabu Pemula**, C. Naga Raju (2021), *"Soft Computing Techniques for Image Restoration"*, LAP LAMBERT Academic Publishing, ISBN: 978-620-3-84669-0
4. **Rambabu Pemula**, S. Vijaya Kumar, C. Naga Raju (2020), *"Techniques for Generation of Random Fields for Image Segmentation and Image Analysis"*, LAP LAMBERT Academic Publishing, ISBN: 978-620-3-19885-7

CONFERENCES Presentations/Participations:

International

1. Presented a paper on "Deep Learning Models for Identification of COVID-19 using CT Images" in the **International Conference on Soft Computing: Theories and Applications (SoCTA2021)** organized by IIIT Kota, during 17-19, December 2021(Springer, Scopus Indexed).
2. Presented a paper on "Juvenile crime categorization with EM clustering" in the **International Conference on Intelligent Systems & Sustainable Computing (ICISSC-2021)** organized by Malla Reddy University, Hyderabad during 24-25, September 2021(Springer, Scopus Indexed).
3. Presented a paper on "*Assessing the relation between family background and juvenile delinquency using data mining*" in the 2019 **International Conference on Computer Communication and Informatics (ICCCI 2019)** organized by department of Computer Science & Engineering, Sri Shakthi Institute of Engineering and Technology, Coimbatore during 23-25, January 2019.
4. Presented a paper on "*Association of Education Levels and Juvenile Delinquency with Data Mining Method*" in the **3rd International Conference on Innovative Computation Technologies (ICICT-2018)**, Organized by RVS Technical Campus during November 15-16, 2018 at Coimbatore.
5. Presented a paper on "Generation of Random Fields for Image Segmentation based on MRF Energy Level Set Method" in **Springer - Smart Computing & Informatics (SCI-2018)** organized by Department of CSE & IT, PVPSIT, Vijayawada during 27-28, January 2018.
6. Presented a paper on "*Image Segmentation using Markov Random Field Energy Function*" in the UGC Sponsored Two-Day International Conference on "**Digital India – The**

Information for All (ICDIA -2016)" organized by the Department of Computer Science & Applications, *K.B.N. College, Vijayawada*, Andhra Pradesh, Indian in collaboration with Krishna University, Machilipatnam on 2nd and 3rd December 2016.

7. Presented a paper entitled "*Generation of Optimal Random Fields for Image Segmentation using Fuzzy Multi-Region Technique*" in the **IEEE International Conference on Communication and Electronics Systems (ICCES 2016)** organized by *PPG Institute of Technology, Coimbatore*, India during 21-22 October 2016.

National

1. Presented a paper entitled "*Query Optimization using the Technique of Progressive Parametric*" in **National Conference on Research Treads in Computer Science and Technology (NCRTCST-2012)** at CMR College of Engineering and Technology organized by the Department of Computer Science and Engineering & Department of Information Technology during 27-28 January 2012.

FDP/WORKSHOPS/SEMINARS CONDUCTED / Organized:

1. Conducted A 5 Day National Level Online FDP on "**CYBER SECURITY IN SERVICE TECHNOLOGIES OF IOT: RESEARCH PERSPECTIVE**" Organized by Department of Computer Science and Engineering, **Raghu Engineering College**, Visakhapatnam in association with Center of Continuing Education, **National Institute of Technology, Warangal** during 02-01-2023 to 06-01-2023.

2. Conducted A 5 Day National Level Online FDP on **Artificial Intelligence and Machine Learning** Organized by Department of Computer Science and Engineering, **Raghu Engineering College**, Visakhapatnam in association with Center of Continuing Education, **National Institute of Technology, Warangal** during 8th November 2021 to 12th November 2021.

Coursera Certifications:

1. *Introduction to TensorFlow for Artificial Intelligence, Machine Learning and Deep Learning* an online non-credit course authorized by **deeplearning.ai** and offer through **Coursera**.

2. *Convolutional Neural Networks in TensorFlow* an online non-credit course authorized by **deeplearning.ai** and offer through **Coursera**.

3. *Natural Language Processing in TensorFlow* an online non-credit course authorized by **deeplearning.ai** and offer through **Coursera**.

4. *Sequences, Time Series and Prediction in TensorFlow* an online non-credit course authorized by **deeplearning.ai** and offer through **Coursera**.

NPTEL Certifications:

1. Python for Data Science

WORKSHOPS/SEMINARS/FDP attended:

1. Participated in 5 Day online FDP on "**CYBER SECURITY IN SERVICE TECHNOLOGIES OF IOT: RESEARCH PERSPECTIVE"**, Organized by Department of Computer Science and Engineering, **Raghu Engineering College**, Visakhapatnam in association with Centre of Continuing Education, **National Institute of Technology, Warangal** during 02-01-2023 to 06-01-2023.

2. Participated in 5 Day National Level Online FDP on **Artificial Intelligence and Machine Learning** Organized by Department of Computer Science and Engineering, **Raghu Engineering College**, Visakhapatnam in association with Center of Continuing Education, **National Institute of Technology, Warangal** during 8th November 2021 to 12th November 2021.

3. Participated in One-week online FDP on "**Deep Learning & Machine Learning Application in Computer Vision"**, organized by the Department of Information Technology, **GMR Institute of Technology**, Rajam, during 26th – 30th July 2021.

4. Participated in 8-day online FDP on **"Optimization Techniques for Engineering Applications"** Sponsored by Ministry of Electronics and Information Technology (MeitY), GoI, organized by E&ICT Academy, **NIT Warangal** during 7th -15th April 2021.

5. Participated in One-week online FDP on **"Machine Learning Using Python Programming"** organized by Department of Information Technology, **Aditya Institute of Technology and Management**, Tekkali during 10th -16th June, 2021.

6. Participated in 5 day online FDP on **"Advancements in Data Analytics using Informatica"** organized by Department of CSE, **Vignan's Institute of Engineering for Women** during 21st – 25th June, 2021

7. Participated in a Five-Day Continuing Education Programme on "*Big Image Data Processing Using Machine Learning Algorithms*" organized by the Department of Computer Science & Engineering in association with Continuing Education Programmes, **National Institute of Technology Warangal**, during 27th – 31st May, 2019.

8. Participated in MeitY, Govt. of India, Sponsored One Week Faculty Development Programme on "*Machine Learning Techniques for Image Processing and Computer Vision*" Organized by the E & ICT Academy, **National Institute of Technology, Warangal** at Department of CSE, NITW from 6th – 11th May 2019.

9. Participated in MeitY, Govt. of India, Sponsored One Week Faculty Development Programme on "*Machine Learning with Python*" Organized by the E & ICT Academy, **National Institute of Technology, Warangal** at Swami Vivekananda Institute of Technology, Secunderabad from 26th November to 1st December 2018.

10. Participated in the Faculty Development Program on "*Object Oriented Analysis and Design*", organized by the Department of Computer Science and Engineering in association with E & ICT Academy of **National Institute of Technology Warangal** during 20th – 31st May, 2016.

11. Participated in one day workshop on *"Soft Computing and Engineering Optimization using MATLAB"* held on April 24, 2015 at **VIT University, Vellore.**

12. Participated in the *"Workshop on Research Methodology"* conducted at **BITS Pilani, Hyderabad Campus** during April 03-04, 2015.

13. Participated in the **AICTE sponsored Two Weeks Winter School Program** on *"Soft Computing Approaches in Pattern Recognition, Image Processing and Matlab"* organized by Department of Information Technology, **Kalyani Government Engineering College, Kalyani, Nadia, Kolkata, West Bengal** from 8th -20th January 2015.

14. Participated in AICTE sponsored Faculty Development Program on *"Research Methodology in Engineering and Technology"* organized by Department of Computer Science & Engineering, **College of Engineering Munnar, Kerala** during 21st October to 3rd November 2013.

15. Participated in a Two-week ISTE workshop on *"Database Management Systems"* conducted by **Indian Institute of Technology, Bombay** from 21st to 31st May, 2013 under the National Mission on Education Through ICT(MHRD).

16. Participated in AICTE sponsored Faculty Development Program on *"Impact of Recent Tools and Techniques is the Processing of Digital Images"* organized by Department of Computer Science & Engineering and Information Technology, **College of Engineering Karunagappally, Kerala** during May 2-15,2013.

17. Participated in *"Two-day Workshop on End-to-End Exploration of MATLAB for Image Analysis"* conducted by Department of Computer Science & Engineering, at **College of Engineering, Anna University, Chennai** during 12th- 13th April 2013.

18. Attended a 14 days AICTE sponsored *"Staff Development Programme on Advanced Data Mining Techniques"* from **14th – 26th May, 2012** at **VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad**.

19. Attended a 8 day certificate course on *"Foundations of Efficient Software Development"* conducted by the Department of Computer Science and Engineering, **Indian Institute of Technology, Hyderabad** during **17-24 December, 2011.**

20. Attended a 6 day workshop on *"Data mining and Data warehousing"* organized by **EnhanceEdu, International Institute of Information Technology, Hyderabad** from **July 1 to July 6,2011.**

21. Attended a 5 day AICTE – Sponsored QIP Short- Term course on *"Software Project Management"* organized by the **Indian Institute of Technology, Kharagpur** at **Indian Institute of Technology, Bhubaneswar** during **February 23 -27, 2011.**

22. Attended a 7 day AICTE sponsored Staff Development Program on *"Selected Topics in Software Engineering"* organized by the Computer Science & Engineering., **Indian Institute of Technology, Kharagpur,** during **08-14 March 2010.**

23. Attended a 15 day AICTE Staff Development Program on *"Emerging Trends in Data Mining"*, organized by the School of Computing, **Gokaraju Rangaraju Institute of Engineering & Technology, Hyderabad** during **22 June -5 July 2009.**

Subjects Handled:
- ✓ Artificial Intelligence
- ✓ Machine Learning
- ✓ Data Wrangling
- ✓ Digital Image Processing
- ✓ Formal Language & Automata Theory
- ✓ Compiler Design

- ✓ Data Engineering (Data Warehouse & Data Mining)
- ✓ Software Engineering
- ✓ Java Programming
- ✓ Data Structure

<u>Declaration</u>

I hereby declare that the above furnished details are true to the best of my knowledge**.**

Place:

Date: **[Dr. Rambabu Pemula]**