# Faculty Profile Brief Profile (Few Paragraphs)

Faculty Photo

Dr Anala M R is working as Professor in Dept of ISE, RV College of Engineering. She has received her Ph.D. in Computer Science and Engineering from Visvesvaraya Technological University, Belagavi. With almost 20+ years of experience in teaching, she has published over 90+ research papers in International Journals and Conferences. She has trained students, faculty and industry professionals on various domains like Outcome Based Education, Teaching Learning process, course outcomes and Program outcomes framing and attainment, Cloud Computing, Deep Learning for computer vision applications, Python for Machine learning, Parallel programming on CPU and GPU, CUDA programming on GPUs, IoT and edge computing. She is involved in initiating Nvidia GPU research centre and Centre of Competence in visual computing at RVCE, also executed and executing various research and consultancy projects from industries like Nvidia, ABB, Citrix R and D, BEL R and D, Samsung R and D, HPE. IBM.

### **Personal Information**

Name: Dr Anala M RDesignation: Professor

• Department: Information Science and Engineering

Email: analamr@rvce.edu.inPhone: 080-68188253

Google Scholar: https://scholar.google.com/citations?user=h9Kn5kIAAAAJ&hl=en

LinkedIn: https://www.linkedin.com/in/anala-m-r-a9860664/

**ORCID:** https://orcid.org/0000-0001-7538-8300

# **Domain of Expertise**

• High Performance Computing, Computer Networks

#### **Research Focus**

Artificial Intelligence and Deep Learning, Large Language Models, GPU Optimization

### **Academic Qualifications**

- **Ph.D.**: [Engineering Discipline], [Visvesvaraya Technological University], [2015]
- M.Tech: [Computer Network Engineering], [Visvesvaraya Technological University], [2007]
- M.Sc./ [Information Technology], [KSOU], [2004]
- B.E./B.Tech: [Computer Science and Engineering], [Bangalore University], [2001]

# **Professional Experience**

Experience			
S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	R. V. College of Engineering	Professor	Aug 2004- till date
2.	NMKRV College for women	Lecturer	Dec 2002- Aug 2004
3.	BES first Grade College	Lecturer	May 2002- Dec 2002
4.	Jamia Institute of Technology	Lecturer	Sep 2001- May 2002

## **Publications & Patents**

#### **Journal Publications**

- 1. Anala M R, Hemavathy Ramakrishna, Rajesh Puttaswamaiah, Acoustic signal detection of search-phase echolocation bat calls using hybrid classification model, Expert Systems with Applications, Volume 284, 2025, 127533, ISSN 0957-4174, https://doi.org/10.1016/j.eswa.2025.127533. (Q1)
- 2. Immadisetty, P., Rajesh, P., Gupta, A. et al. Multimodality in online education: a comparative study. Multimed Tools Appl (2025). https://doi.org/10.1007/s11042-024-20540-0 (Q1)
- 3. Kaganurmath, S., Cholli, N.G. and Anala, M.R. 2025. DLKS-MQTT: A Lightweight Key Sharing Protocol for Secure IoT Communications. Engineering, Technology & Applied Science Research. 15, 2 (Apr. 2025), 21532–21538. DOI:https://doi.org/10.48084/etasr.10216. (Q2)
- 4. K C Ganashree, R Hemavathy, M R Anala, "Land scene classification from remote sensing images using improved artificial bee colony optimization algorithm", International Journal of Electrical and Computer Engineering (IJECE), Vol.14, No.1, February 2024, pp.347-357ISSN: 2088 -8708, DOI: 10.11591/ijece.v14i1. pp.347-357(Q3).
- 5. M. R. Anala, R Hemavathy, M Dhanush, "Acoustic Signal Detection of Search-Phase Echolocation Bat Calls with CNN". International Journal of Intelligent Systems and Applications

- in Engineering, 12(11s), pp.78-85(Q3).
- 6. Anala M. R., S. M. S. (2024). Al-Based Surveillance Framework for Physical Violence Detection. International Journal of Intelligent Systems and Applications in Engineering, 12(3), 1470–1481. (Q3).
- 7. Ananya Belagodu Shivayogi, Nehal Chakravarthy Matasagara Dharmendra, Anala Maddur Ramakrishna and Kolala Nagaraju Subramanya, Real-Time Traffic Sign Recognition Using Deep Learning, https://doi.org/10.47836/pjst.31.1.09, Pertanika J. Sci. & Technol, Volume 31, Issue 1, pp: 137 148, 2023. (Q3).
- 8. K V Sarath Kumar, Dr Anala M R, Payment Routing Module using Kafka Streams, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395–0056 Volume: 09 Issue: 07 July 2022, p-ISSN: 2395–0072, pp: 2680–2683.
- 9. K Anjani Vaibhavi, Anala M R, Webhook Support for Alert Policies, International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056 Volume: 09 Issue: 07 July 2022, p-ISSN: 2395-0072, pp: 2598-2601.
- 10. Srividya M. S, Anala M. R, Chetan Tayal, "Deep learning techniques for physical abuse detection", "IAES International Journal of Artificial Intelligence (IJ-AI)", Vol. 10, No. 4, December 2021, ISSN: 2252-8938, DOI: 10.11591/ijai.v10.i4.pp971-981(Q2).
- 11. Akanksh A Manjunath, MC Sohan, MR Anala, KN Subramanya, Design thinking approach to simplify monetary transactions for the visually challenged, "British Journal of Visual Impairment", Sage Publications (Q3).
- 12. GR Varshini P, Soundarya R, Merin Meelet, Dr. Anala M R, Smitha G R, "Speech Emotion Analyzer", International Journal of Research Publication and Reviews, Vol (2) Issue (8) (2021) Page 1026-1034.
- 13. Mohammad Hanan Bhat, Dr Anala M R, "Performance Monitoring for Microservices Architecture Based Applications", International Journal of Scientific Research and Engineering Development, Volume 4 Issue 3, ISSN: 2581–7175, May –June 2021, Page: 1510 1514.
- 14. A Dharma Reddy, P Satya Sriram, R Shreya, Riya Naresh, Dr. Anala M R ,Prof. Ganashree, Object Classification Using Satellite Images, International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056, Volume: 08 Issue: 06, June 2021, pp: 1118-1122.
- 15. Mohammad Hanan Bhat, Dr Anala M R, "A Comprehensive Multimodal Framework for Plant Health Monitoring", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321–9653; Volume 9, Issue VII July 2021–pp:1793–1796.
- 16. Govardhan N, Dr. Anala M R, "Adaptive cards for conversational user interfaces and Bot Frameworks", High Technology Letters, ISSN NO: 1006-6748, Volume 27, Issue 6, 2021, pp:70-76.
- 17. Vikas B Naik, Dr. Anala M R, "Development of link sharing application", PENSEE JOURNAL, VOLUME 51 ISSUE 06 2021, ISSN: 0031-477 3, pp:568-572.
- 18. Harshitha R, Kavya S Muttur, Nandini R, Jayanth P, M S Srividya, Anala M R, Real Time Human-Human Interaction Recognition Using Convolutional Neural Networks, International Research Journal of Engineering and Technology (IRJET), e-ISSN: 2395-0056, Volume: 08 Issue: 06 | June 2021, pp:1585-1588.
- 19. M S Srividya , Anala M R , Ramyashree V , Shalini R , Tushar Lal , Aman Verma, Human Action Recognition using Multimodal Convolution Neural Network, Journal of Emerging Technologies and Innovative Research (JETIR), Volume 8, Issue 6, ISSN-2349-5162, pp:c128-c132

- 20. Zutti Vinayak, Dr. Anala M. R, Dr. Sagar B. M., "STUDY ON WEB AUTOMATION USING SELENIUM", High Technology Letters, ISSN NO: 1006-6748, Volume 27, Issue 6, 2021, pp:54-62(Q4).
- 21. Shlok Sethia, Aditya Ravichandran, Anala M R, "A Study of Intel SGX and its Components Associated with Side Channel Attacks", Journal of Seybold Report, ISSN NO: 1533-9211, VOLUME 15 ISSUE 7 2020, pp: 485-494(Q4).
- 22. Akshay Mammen Koshy, Anala M R, Ganashree K C, Hemavathy R, "Satellite images for traffic management: A Comprehensive Survey", Solid State Technology Volume: 63 Issue: 1s Publication Year: 2020, pp:55-64(Q4).
- 23. Aman Anupam, Prathika Gonchigar, Shashank Sharma, Prof. Prapulla SB, Dr. Anala MR, "Analysis of Open Source Node.js Vulnerability Scanners", International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056, Volume: 07 Issue: 05, 2020, pp:5449-5454.
- 24. Parinith R Iyer, Shrutheesh Raman Iyer, Raghavendran Ramesh, Anala M R, K.N. Subramanya, "Adaptive real time traffic prediction using deep neural networks", IAES International Journal of Artificial Intelligence (IJ–AI), Vol. 8, No. 2, June 2019, ISSN: 2252–8938, pp. 107–119. (Q2).
- 25. Deepika Dash, Anala M R, "Automatic Parallelization using Open MP Directives", International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278–3075, Volume-8 Issue-11, September 2019, pp:4059-4063. (Q4).
- 26. Ramamani, B. N., & Anala, M. R, "A Brief Understanding About Quality Metrics in Virtual Reality", International Journal of Research in Engineering, Science and Management, Volume-2, Issue-5, ISSN (Online): 2581-5792, May-2019, pp:512-514.
- 27. N Kanakapriya, 2 Dr. Anala M R, "Comparative Analysis of PyTorch And Caffe Frameworks", International Journal of Advance Research and Innovative ideas in education, Vol-5 Issue-3 2019, ISSN(O)-2395-4396, PP:1471-1476.
- 28. Salman Asif S, Anala M R, "DevOps with Modern Software Development", International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, Volume-9 Issue-6, May 2020, pp:18-21.
- 29. Salman Asif S, Sachin R Doddaguni, Trilok Girish Kamagond, Anala M R ,Mamatha T, "Household water resource monitoring and leakage detection", International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231–2307, Volume–9 Issue–6, May 2020, pp:12–17.
- 30.M S Srividya, Anala M R , "Research Trends in Hand Gesture Recognition Techniques", International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-6, March 2020, pp:1059-1064(Q4).
- 31. Amogh S. Gopadi, Deepak S., Kiran R. B., Naveena A. M., Srividya M. S., Anala M. R, "Facial Expression Analysis using Convolutional Neural Networks", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 8958, Volume-9 Issue-4, April 2020, pp:1142-1146(Q4).
- 32. Parinith R Iyer, Anala. M. R, Hemavathy R, "Research Perspectives and Advancements in Open-Domain Chatbots", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 8958, Volume-9 Issue-4, April 2020, pp:1672-1678(Q4)
- 33. Anala M. R., Amit N. Subrahmanya, Allbright D'Souza, "Performance Analysis of Mesh-based NoC's on Routing Algorithms", International Journal of Electrical and Computer Engineering (IJECE) Vol. 8, No. 5, October 2018, pp. 3368-3373. (Q2).
- 34. Rithesh R. N., Vignesh R, Anala M. R., "Autonomous Traffic Signal Control using Decision Tree",

- Vol. 8, No. 3, ISSN: 2088-8708, DOI: 10.11591/ijece.v8i3.pp1522- 1529, June 2018, pp. 1522-1529. (Q2).
- 35. Malika Makker, Rohan Simha, Anala M.R., Revathi S.A, "HTTP Logs Analysis and Its Use Cases Survey". Journal of Emerging Technologies and Innovative Research, Volume 6, Issue 4, (ISSN-2349-5162, pp:102-106, 2019.
- 36. Supreetha M, Anala M R, "Survey: GANs for dataset generation", International Journal of Creative Research Thoughts (IJCRT), Volume 6, Issue 2, ISSN: 2320–2882, April 2018, Pages:1415–1421.
- 37. Bharath G, Anala M R, "Big Data Analytics in Precision Agriculture: A Survey", International Journal of Research and Scientific Innovation (IJRSI), Volume IV, Issue VIS, June 2017, ISSN 2321–2705, Pages:162–166.
- 38. Kota Aswani, Anala M R, Suresh Rathinam , "Bare metal Cloud Builder", Imperial Journal of Interdisciplinary Research , Vol-2, Issue-10, 2016 ISSN: 24,54-1362, Pages: 1844-1851.
- 39. Shreya R, Shruthi R, Anala M.R, Shobha G, "Performance Analysis during Live Migration", International Journal of Engineering Research & Technology, ISSN: 2278-0181, Vol. 2 Issue 4, 2013, (Q3)
- 40. Dhananjaya.A. C, Rishi Singh, Anala .M. R, "Adhoc RMA Label Generator using RFID Tracking", International Journal of Engineering Science and Computing, May 2017, ISSN 2321-3361, Volume 7 Issue No.5, PP:11417–11421.
- 41. Anala M.R, Kartik K.R, Madhusudhan Aithal M., Jeevan D.C, "Comparative Study of Computationally Intensive Algorithms on CPU and GPU", International Journal of Applied Engineering Research, ISSN 0973-4562, Volume 11, Number 5 (2016), pp 2996-2999. (Q2).
- 42. Rajeshwari D G, Anala M R, "Implementation and Analysis of Face Detection Methods", international journal of current engineering and scientific research (IJCESR) ISSN (PRINT): 2393-8374, (ONLINE): 2394-0697, VOLUME-2, ISSUE-7, July 2015, pp.108-113.
- 43. Jyoti Shetty, Shobha G, Anala M R," A State-of-art Comparison of Opensource laaS Cloud Softwares", American International Journal of Research in Science, Technology, Engineering & Mathematics, 10(1), March-May-2015, ISSN (Print): 2328-3491, ISSN (Online): 2328-3580, ISSN: 2328-3629, pp:26-30.
- 44. Rohit R. Khamitkar, Anala M R, "Survey on Heterogeneous Computing Paradigms", International Journal of Research (IJR) Vol-2, Issue-2 February 2015 ISSN 2348-6848, pp.253-259.
- 45. Prakash H R ,Anala M R, Dr. Shobha G ,"Performance analysis of transport protocol during live migration of virtual machines" in Indian Journal of computer science and engineering. ISSN: 0976-5166 Vol. 2 No. 5 Oct-Nov 2011, 715-722.
- 46. Anala M. R., Hemavathy R., Shobha G, "Outcome Based Education: An empirical approach", Journal of Engineering Education Transformations, Volume 28, No.2 & 3, Oct. 2014 & Jan. 2015, ISSN 2349-2473,pp:92-97(Q3).
- 47. Jyoti Shetty, Anala M R, Shobha G, "An Approach to Secure Access to Cloud Storage Service", International Journal of Research, Vol 2, issue 1, pp.364–368, 2015.
- 48. Jyoti Shetty, Anala M R, Shobha G, "A Study on Cloud Forensics: Challenges, Tools and CSP Features", CiiT, Biometrics and Bioinformatics; Vol 6, No 6 (2014). pp. 149–153.
- 49. Dhananjaya G and Anala M R, "Integrating GlusterFS with iSCSI Target", International Journal for Scientific Research & Development, Vol. 2, Issue 07, 2014, ISSN (online): 2321–0613, pp.81–82.
- 50. Suma Patil, Anala.M.R, Nelakanti Gangadhara Sanya, "Development of ITSM BMC Log File

- Analyzer", IJSRD International Journal for Scientific Research & Development Vol. 2, Issue 04, 2014, ISSN (online): 2321-0613. pp. 23-25.
- 51. Anala M.R, Shobha G, "Empirical study on offline vs live migration", International Journal of Computer Engineering and Technology (IJCET), ISSN 0976-6367(Print), ISSN 0976 6375, Volume 5, Issue 5, May (2014), pp. 82-93.
- 52. Jyoti Shetty, Anala M R, Shobha G. "A Survey on Techniques of Secure Live Migration of Virtual Machine". International Journal of Computer Applications 39(12):34–39, February 2012. Published by Foundation of Computer Science, New York, USA.
- 53. Anala M R, Dr. Shobha G, "Autonomic computing in virtualized environment "International Journal of Information Technology Convergence and Services (IJITCS) Vol.2, No.1, February 2012, DOI: 10.5121/ijitcs.2012.2108, 67-74.
- 54. Anala M R, Dr. Shobha G, "Performance Study On Open Source Softwares for virtualization Using Hard Disk Benchmarking Tool", CiiT International journal of automation and autonomous system, Print: ISSN 0974 9659 & Online: ISSN 0974 9551,2011,312–315.

#### **Conference Papers**

#### **List of National Conference publications**

- 1. Anala M R, Dr. Shobha G, "Survey on High availability issues in server virtualization" National Conference on Communication, Computing and Technologies–NCCT–10 at RVCE during 22–23 January 2010.
- 2. Anala M R, Chandrasekar S," Conformance verification of DHCP options and vendor extensions" at National Symposium on Emerging Trends on Information Technology at CMRIT, Bangalore during 16-17 August 2007.
- 3. Nithin S, Anala M R, "Implementation of ISA100.11a Network" at national conference on NLPPES-10 at RVCE during 23-24 April, 2010.
- 4. Sandeep S, Anala M R, "Cisco Smart Automation tool" at national conference on NCETIT-11 at DBIT during 10th -12th March, 2011.
- 5. Anala M R, Rithesh R N," Intelligent transportation systems in india: a Survey", National Conference on Leveraging Intelligent Transportation System for Enabling Smart Cities (ITS-2017), 2nd 4th March 2017.

#### List of International Conference publications

- 1. A. Raychaudhuri, V. Athrey and Anala M.R., "Active Learning Methods for Training Datasets," 2024 8th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS), Bengaluru, India, 2024, pp. 1–6, doi: 10.1109/CSITSS64042.2024.10816811.
- Prajwal N J, Shreenidhi T L, M S Sandeep Kamath, Manoj M, K Akash, Priyanshu Ranjan, Anala M R "Architecture Comparison and Security Assessment Tool for Network Infrastructure," 2024 8th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS), Bengaluru, India, 2024, pp. 1-6, doi: 10.1109/CSITSS64042.2024.10816965.

- 3. Anala, M.R., Hemavathy, R., Kulkarni, K., Samhitha A, Generative Adversarial Network (GANs) for Image Translation, 13th International Conference on Advances in Computing, Control, and Telecommunication Technologies, ACT 2022, 2022, 8, pp. 277–284
- 4. S. Dasu, M. M. Ranade, S. Sarkar and A. M R, "Computer Vision based Tools and Technologies for Navigational Assistance for the Visually Impaired," 2022 International Conference on Augmented Intelligence and Sustainable Systems (ICAISS), Trichy, India, 2022, pp.802-808, doi: 10.1109/ICAISS55157.2022.10010946.
- 5. Bhavya M, Anala M R, Deep Learning Approach for Sound Signal Processing, 2022 International Conference on Futuristic Technologies (INCOFT) during 25th & 27th November 2022.
- 6. Srijith, K. B. R, G. N and A. M. R, "Inter-Service Communication among Microservices using Kafka Connect," 2022 IEEE 13th International Conference on Software Engineering and Service Science (ICSESS), Beijing, China, 2022, pp. 43–47, doi: 10.1109/ICSESS54813.2022.9930270.
- 7. Arthik Bhandary and Anala M R, "Comparative study on Handwritten Character Recognition tools", Fifth International Conference on Artificial Intelligence and Soft Computing AISC 2021(SCOPUS INDEXED).
- 8. Sohan M C, Akansh A M, Anala M R, and Hemavathy R, "Banknote Recognition Mobile Application for the Blind", SPAST Abs, vol. 1, no. 01, Oct. 2021(SCOPUS INDEXED).
- 9. Nagashree N Rao, Ashwani Sharma, Anala MR, Aishwaryarajan, Prutha, Nipun, Sohan, "Predictive Modelling of Different Stress Treatments for Physiological and Nutritional Parameters of Ocimum sanctum ", SPAST Abstracts: Vol. 1 No. 01 (2021): Smart Green Connected Societies(SCOPUS INDEXED).
- 10. MR Anala, Sharadadevi Kaganurmath, "Study on parameters influencing the VM migration in datacenters", 1th International Conference on Cloud Computing, Data Science & Engineering, 2021, Pages: 343–347.(SCOPUS INDEXED)
- 11. J. Kamal, P. Priya, M. R. Anala and G. R. Smitha, "A Classification Based Approach to the Prediction of Song Popularity," 2021 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), 2021,pp. 1–5, doi: 10.1109/ICSES52305.2021.9633884(SCOPUS INDEXED).
- 12. Tanya Dinesh; Anala M R; T. Terry Newton; Smitha G R, "Al Bot for Academic Schedules using Rasa," 2021 International Conference on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES), 2021, pp. 1-6, doi: 10.1109/ICSES52305.2021.9633799(SCOPUS INDEXED).
- 13. Anala M.R.; Malika Makker; Aakanksha Ashok, "Anomaly Detection in Surveillance Videos", 26th International Conference on High Performance Computing, Data and Analytics Workshop (HiPCW), DOI: 10.1109/HiPCW.2019.00031, pp:93–98, 2019 (SCOPUS INDEXED).
- 14. Abhinav S, Sahana Srinivasan, Aishwarya Ganesan, Anala M R, Mamatha T, "Wireless water quality monitoring and quality deterioration prediction system", 26th International Conference on High Performance Computing, Data and Analytics Workshop (HiPCW), DOI: 10.1109/HiPCW.2019.00031, pp:93–98, 2019 (SCOPUS INDEXED).
- 15. M S Srividya; MR Anala; NM Dushyanth; Datla V. Satya K. Raju, "Hand Recognition and Motion Analysis using Faster RCNN", 4th International Conference on Computational Systems and Information Technology for Sustainable Solution, doi: 10.1109/CSITSS47250.2019.9031033, pp. 1-4, 2019 (SCOPUS INDEXED).
- 16. Anala M R, Deepika Dash, "Framework for Automatic Parallelization", 2018 IEEE 25th

- International Conference on High Performance Computing Workshops (HiPCW),ISBN: 978-1-7281-0114-9, 2018 (SCOPUS INDEXED).
- 17. M. Brindha; R. Jayapal; Anala M R, Stability Analysis of Networked Control System, International Conference on Design Innovations for 3Cs Compute Communicate Control (ICDI3C), ISBN: 978-1-5386-7524-3 April 2018, pp:137 140.
- A V Megha; V Nandan; Prajna Bhat; P Ajay Rao; M.R Anala, "Automated Consolidation of Virtual Machines", 2017 International Conference on Current Trends in Computer, Electrical, Electronics and Communication (CTCEEC), DOI: 10.1109/CTCEEC.2017.8455131, Pages: 167 – 170.
- 19. Parinith R Iyer, Shrutheesh Raman Iyer, Raghavendran Ramesh, Dr.K N Subramanya, Dr. Anala M R, "Real-time Vehicle detection and dynamic traffic light prediction" poster presentation in 25th IEEE International Conference On High Performance Computing, Data, And Analytics 17–20 December 2018, Bengaluru.
- 20. Amit Subrahmanya, Allbright D'Souza, Anala M.R and John Jose (IIT Guwahati), "Performance Analysis of Mesh-based NoC's on Routing Algorithms", Poster presentation in 24th International Conference on High Performance Computing, Data and Analytics held at Jaipur held during 18th to 21st December 2017.
- 21. Ananth M, Vishwas S, Anala M R, "Cache Friendly Strategies to optimize Matrix Multiplication", 7th IEEE International Advance Computing Conference, IACC- 2017,pp:23-27.
- 22. Amit G Bhat, Meghana N Babu , Anala M R," Towards Automatic Parallelization of "for" loops ",2015 IEEE International Advance Computing Conference (IACC), DOI: 10.1109/IADCC.2015.7154686, ISBN: 978-1-4799-8048-2, June 2015, pp:136-142.
- 23. Anala M. R., Hemavathy R., Shobha G," Outcome Based Education: An empirical approach", 2nd International Conference on Transformations in Engineering Education, eISSN: 2394–1707, pp:52–56.
- 24. Anala M R, Jyoti Shetty, Dr. Shobha G," A Framework for Secure Live Migration of Virtual Machines", International conference on Advances in computing, Communication and informatics (ICACCI-2013), DOI: 10.1109/ICACCI.2013.6637178, ISBN: 978-1-4799-2432-5,Pages:243-248.
- 25. Anala M R, Manjunath Kashyap, Dr.Shiobha G, "Application performance Analysis during live migration of virtual machines", 3rd IEEE International Advance Computing Conference (IACC-2013),ISBN: 978-1-4673-4528-6, Pages:368-374.
- 26. Anala M R, Dr. Shobha G," Comparative Study of Application Performance on Virtual Machine and Physical Machine. ", 2012 IEEE conference on computational Intelligence and Computing research(ICCIC-2012), ISBN-978-1-4673-2481-6, Pages:359-364.
- 27. Anala M R, Dr. Shobha G, "Application of autonomic computing principles in virtualized environment", ITCS-2012, SIP, JSE-2012, DOI: 10.5121/csit.2012.2118, pages: 203-208.
- 28. Anala M R, Dr. Shobha G, "A survey: workload balancing in Virtual machines" ICCA 2010, 24th –27 Dec, Pondicherry, India, Pages:357–362.

#### **Books/Book Chapters**

1. Gajalakshmi, K., Anantharama, V., Anala, M.R.(2023). Village Mapping for Micro-level Planning Using UAV Technology. In: Karthikeyan, P., Kumar, S., Anbarasu, V. (eds) Drone Data Analytics in Aerial Computing. Transactions on Computer Systems and Networks. Springer, Singapore. https://doi.org/10.1007/978-981-99-5056-0\_12.

2. Srividya M S and Anala M R, Machine Learning Based Framework for Human Action Detection In:Satyasai Jagannath Nanda and Rajendra Prasad Yadav (eds), Data Science and Intelligent Computing Techniques, SCRS, India, 2023, pp. 849–857. https://doi.org/10.56155/978-81-955020-2-8-72.

# **R & D Grants & Consultancy Projects**

# **Ongoing & Completed Research Projects**

- [An IoT device for Remote Monitoring and classification of bat species], Funding Agency: [Bat Conservation India Trust (BCIT)], 15.32Lakhs, Duration: [ 2025–26], Role: [PI].
- [Design & Develop optimized GPU implementation using Open CL for executing language models on android devices], Funding Agency: [Samsung R&D]-2.36 Lakhs, Duration: [ 2024-25], Role: [PI].
- [PAEN Cyber], Funding Agency: [ ABB Global Industries]-2.36 Lakhs, Duration: [ 2024-25[PI].
- [Architecture Comparison Tool], Funding Agency: [ABB Global Industries]-5.31Lakhs, Duration: [ 2024-25[PI].
- [GPU Implementation using OpenGL for non-Al Programs], Funding Agency: [Samsung R&D] 2.36 Lakhs, Duration: [2024-25], Role: [PI].
- [BatEYE: An acoustic signal monitoring device for bat habitat], Funding Agency: [Nvidia Pvt Ltd]-8.25Lakhs, Duration: [2022-23], Role: [PI].
- [Chatbot Interface for SD WAN Config Management], Funding Agency: [ Citrix R&D]-2.95Lakhs, Duration: [ 2019-20], Role: [PI].
- [Smart app meter for Energy & Water management Aided with Water and Air quality monitoring], Funding Agency: [IBM Shared University Research Award] 8.45 Lakhs, Duration: [2019-21], Role: [PI].
- [Work Package 1: RS 485/Modbus Driver wrapper and simple analysis widgets], Funding Agency: [ABB Global Industries] 3 Lakhs, Duration: [2018-19], Role: [PI].
- [Infrastructure as Service Automated VM provisioning and Service Assurance], Funding Agency: [CISCO Systems], Pvt. India Ltd 7.9 Lakhs, Duration: [ 2014–15], Role: [Co-PI].

# **Ongoing & Completed Consultancy Projects**

- [Outlook Add-in for Applications built with Wizergos Platform] Funding Agency: [Wizergos Pvt Limited], Duration: [2023–24], Role: [PI], Amount: [1.18Lakhs].
- [Low code Developer Training Curriculum Development] Funding Agency: [Wizergos Software Solutions Pvt. Ltd.], Duration: [2022–23], Role: [PI], Amount: [1.77Lakhs].
- [Low code Developer Training] Fundig Agency: [Wizergos Software Solutions Pvt. Ltd.], Duration: [2022–23], Role: [PI], Amount: [3.83Lakhs].
- [Training on Power BI] Fundig Agency: [Toyota Kirloskar Autoparts.], Duration: [2023–24], Role: [PI], Amount: [1.77 Lakhs].
- [Visual Computing Lab Sponsorship] Funding Agency: [Hewlett Packard Enterprise], Duration: [2021–22], Role: [PI], Amount: [1.57 Lakhs].
- [Map a Bat roost App Development] Funding Agency: [Bat Conservation India Trust], Duration: [2021–22], Role: [PI], Amount: [1.18 Lakhs].
- [Al,ML- Selfies and video portraits of the future] Funding Agency: [Samsung R&D], Duration: [2021–22], Role:[PI], Amount: [0.7 Lakhs].
- [Training Centre for Visual Computing] Duration: [2021-24], Role: [PI], Amount: [18.2 Lakhs].
- [Framework to automate compliance patch management] Funding Agency: [Hewlett Packard Enterprise], Duration: [2020–21], Role: [PI], Amount: [1.18 Lakhs].
- [Game Frame Analyzer] Funding Agency: [Samsung R&D], Duration: [2023–24], Role: [PI], Amount: [0.75 Lakhs].
- [XLSX Engine] Funding Agency: [Gnostice Pvt Ltd], Duration: [2015-16], Role: [PI], Amount: [4 Lakhs].
- [Smart Factory Prototype] Funding Agency: [ABB], Duration: [2018–19], Role: [PI], Amount: [1 Lakhs].

## **Professional Memberships**

IEEE, IETE, MISTE, MCSI

# **Awards & Recognitions**

• Second Rank in M.Tech, (CNE) – Visvesvaraya Technological University, Belgaum.

- Recognized as NVIDIA DLI University Ambassador.
- Received Travel grant from HiPC 2017 for attending 24th IEEE International Conference on High Performance Computing, Data and Analytics held at Jaipur.
- UG Students Received Dr S K Shivakumar Award for their projects from Karnataka Science and Technology Academy (KSTA) under my guidance.
- Received IBM Shared research award in 2018

## **Student Supervision**

- Ph.D. Candidates: Pursuing [5], Graduated [1]
- M.Tech/M.Sc. Students: [50]
- Undergraduate Research Mentees: [100]

# **Teaching**

#### Core Courses: [Current semester]

- [MIT323B1] [Large Language Models]
- [CS222AI] [Principles of Programming Using C]

#### Advanced/Lab Courses:

• [Principles of Programming Using C]]

## **Professional Roles and Responsibilities**

- Institution Innovation Council (President)2025–27
- Coordinator for Centre for Visual Computing
- Member of Academic Council (2017–2019)
- Member in Intelligent System group in CISCO-RVCE, CoE-IoT.
- VTU and Autonomous Theory examination conduction coordination (2017-19)
- NSS Coordinator year 2013-15
- Member in Malpractice Case Consideration Committee (2022-24)
- Member in IOAC committee
- Member in OBE committee
- Program and NBA coordinator (ISE, MTech [IT] 2022-2023)
- NBA and Program Coordinator (CSE, RVCE from 2015 to 2019).

#### **External Connect**

- Member of BoS in
- Member of BoE / BoE / Academic Council / Governing Body etc

# **Industry Training**

- 1. Training on "Low Code Platform" 10th April 19th April 2024, wizergos pvt ltd.
- 2. Training on "Low Code Platform" from 11th Dec 21st Dec 2023, wizergos pvt ltd
- 3. Training on "Low Code Platform" 19th Sept 29th Sept 2023, wizergos pvt ltd.
- 4. Training on "Power BI- Data Analytics tool" from 12th Sept 2023 to 14th Sept 2023, Toyota Auto Parts ltd.
- 5. Training on "Low Code Platform" 17th July -24th July 2023, wizergos pvt ltd.
- 6. Training on "Low Code Platform" 15th May 22nd May 2023, wizergos pvt ltd.
- 7. Training on "IIoT with Python Programming" on May 6 th & 7 th, 2019 and May 30th, 31st & June 1st 2019, TE connectivity.

#### **Certifications**

- 1. NPTEL FDP on "Understanding Design Thinking and People Centred Design"
- 2. NPTEL FDP on "Design Thinking A Primer"
- 3. NPTEL course on "Python for Datascience".
- 4. Infosys Springboard course on "Probability and Statistics using Python"
- 5. Infosys Springboard course on "Python for Data Science"
- 6. Infosys Springboard course on "Basics of Linear Algebra using Python"
- 7. UDEMY Course on "Python Image Processing with Scikit –image".
- 8. Coursera course on "Al for everyone".
- 9. Coursera course on" Neural Networks and Deep learning".
- 10. Coursera course on "Improving Deep Neural Networks: Hyperparameter tuning, Regularization and Optimization".
- 11. NVIDIA DLI course on Fundamentals of Deep Learning for Computer Vision.
- 12. Nvidia DLI Platform Course for Instructors
- 13. Coursera course on "Machine Learning".
- 14. UDACITY Nano degree foundation course on "Deep Learning".
- 15. NPTEL course on "Deep Learning for Visual Computing"
- 16. Coursera course on "Structuring Machine Learning Projects"
- 17. Nvidia DLI course on "Image Classification with DIGITS, Object Detection with DIGITS"
- 18. Nvidia DLI course on "Fundamentals of Deep Learning"

- 19. Coursera course on "Convolutional Neural Networks"
- 20. Coursera course on "Sequence Models"
- 21. Completed coursera Specialization on "Deep Learning" (5 Courses)

#### **Invited Talk**

- 1. Conducted Training from 5th December to 7th December 2024 on "Outcome Based Education, Teaching Learning Process, Assessment and Evaluation" at Annasaheb Dange College of Engineering and Technology, Ashta, Maharashtra.
- 2. Delivered a session on App design in Matlab on 12th July 2024 for Electronics and Instrumentation Students as part of skill lab
- 3. Delivered Session on "AIML Explorer: Unleashing Student Potential" for the students of Ashoka Women's Engineering College on 19th Feb 2025.
- 4. Delivered Session on "Multicore Programming with OpenMP" in One Week Advanced Faculty Development program on "Empowering Research with High-Performance Computing and GPU Technologies", 17th to 21st March, 2025.
- 5. Delivered Session on "Creative problem solving using Design Thinking" on 28/2/2025 at Atria Institute of Technology.
- 6. Delivered a Talk in AICTE sponsored FDP on "Accreditation Process NBA with a focus on Active Learning" as part of Share & Mentor Institutions (Margdarshan) Scheme organized from 17-21, October 2022.
- 7. Resource person for one day workshop on Outcome Based Education on 14th July 2022 at Dayananda Sagar University.
- 8. Resource person for the workshop on "Course Outcomes & Mappings" on 04/05/2021 & 08/05/2021 at Government College of Engineering, Aurangabad.
- 9. Resource person for the workshop on "Reframing of COs-POs "organized by Quality Assessment & Skill development center of New Horizon college of Engineering on 28/9/2021.
- 10. Resource person for NBA Criteria 3 presentation and discussion at Dayanand Sagar College of Engineering on 11th feb 2021
- 11. Resource person for "Online Faculty development Program for CO-PO attainment" organized for faculty of PG centres at VTU Belagavi, Kalaburgi, Mysuru and Muddenahalli on 12/5/2020 and 15/5/2020.
- 12. Resource person for NBA orientation and Criteria 3 presentation at Dayanand Sagar College of Engineering on 14th May 2020.
- 13. Resource person for Five days workshop on "OBE and Accreditation Process", under AICTE Share & Mentor Institutions (Margdarshan) Scheme, GM Institute of Technology, Davanagere on 23 and 24th January 2020.
- 14. Resource person for online faculty training on "OBE and Program outcome attainment Process", Dayananda Sagar College of Engineering on 24th May 2020.
- 15. Delivered a talk at Bangalore Institute of Technology on "Importance of OBE, Role, Attitude and commitment of faculties in NBA Process" on 22/12/2016.
- 16. Delivered a talk on CO-PO Attainment at department of Biotechnology, RVCE.

- 17. Resource person for five day "FDP on OBE and its Impact on Accreditation Process" from 6/7/2021 to 10/7/2020 organized by RVCE under Margadarshan Scheme
- 18. Presented a talk on CO and PO attainment during the NBA workshop organized from 11/12/2014 to 13/12/2014.
- 19. Resource person for the Faculty Development Programme on "Frontiers in Computational Sciences" organized by Atria Institute of Technology, Department of CSE, from 18-04-2022 TO 22-04-2022. (19-04-2022)
- 20. Resource person for Five Days Online Faculty Development Program on the "Emerging trends in Data Analytics" from 10th to 14th May 2021 organized by BMS Institute of Technology.
- 21. Resource person for Training on "Python Programming and Machine Learning" Organized by Material Advantage RVCE Student Chapter on 19/11/2021, 20/11/2021, 26/11/2021 and 27/11/2021.
- 22. Resource person for AICTE-ISTE sponsored one week Induction Programme on "Design Thinking to Augment 21st Century Skills" organized by Master of Computer Applications, RV College of Engineering on 10/12/2021.
- 23. Resource person for Internship program on "Visual Computing" organized by department of ISE, RV College of Engineering on 1/09/2021 and 2/09/2021.
- 24. Resource person for Internship program on "Intelligent Systems" organized by Centre of excellence in IoT, RV College of Engineering on 13/09/2021.
- 25. Nvidia DLI certification course on "Fundamentals of Deep Learning for computer vision applications" on 22 JULY 2020
- 26. Delivered a talk on "Python Programming and Applications" for RVCE research Scholars on 10/10/2020.
- 27. "An Introduction to Internet of Things (IoT) and Its Applications for Smart Transparent and Immutable Ecosystem" organized by department of CSE, Noida Institute of Engineering and Technology, Greater Noida held from 17th- 22nd August 2020.
- 28. Resource person for training Professionals from TE connectivity on" IIoT with Python Programming" on May 6 th & 7 th, 2019 and May 30th, 31st& June 1 st 2019
- 29. Delivered a talk on formatting Journal Papers on 15th July 2019 during one day research scholar meet at RVCE.
- 30. Trained 4th (20/3/2020) and 5th(19/9/2019) semester MCA students to certify the course on "Deep Learning for Computer vision applications" from NVIDIA DLI as part of their experiential learning component for an elective "soft computing".
- 31. Resource person for training students from KS School of Engineering and Management on "Image processing, Deep learning and Cloud services" on: 19th and 24th July 2019.
- 32. Delivered a talk on "Deep Learning" on 29th Jan 2019 as part of five day FDP on "Data Analytics-A Practical Approach" organized from 27th -31st Jan 2020 at BMS Institute of Technology.
- 33. Delivered a talk at BMS College of Engineering on "Virtualization Types and Migration" on 05/5/2016
- 34. Delivered a talk at R V College of Engineering on "Parallel programming on CPU and GPU" on 28/07/2016.