

M.S.HEMA, ME., Ph.D.,

Sri Venkateshwara College of Engineering

Bengaluru

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SUMMARY: A Ph.D qualified professional with **26 years** of academic experience to undertake any challenging academic, training, administrative, managerial work.

TECHNICAL SKILLS:

RDBMS :	Oracle, MySQL.
Suites :	MS Office
Programming Languages :	C/C++, Python, R, JAVA
Operating Systems :	Windows, Linux
Concepts :	DBMS, Operating system, Object Oriented Programming, Object Oriented Analysis and Design, Data Structures, Data Mining, Business Intelligence, Data Warehousing, Service Oriented Computing, Big Data Analytics, information Retrieval Systems, Data Science, Machine learning Techniques, Deep learning

WORK EXPERIENCE:

- Working as Professor and Head (i/c) in Computer Science & Engineering department at RV Institute of Technology and Management, Bengaluru, India from Jan 2025 to Till date.
- Worked as Professor and Head in Computer Science & Engineering department at Sri Venkateshwara College of Engineering, Bengaluru, India from Dec 2022 to Dec 2024.
- Worked as Associate Professor in Information Technology department at Anurag University, Hyderabad, India from December 2020 to Dec 2022.
- Worked as Professor in Computer Science & Engineering department at Aurora Scientific Technological and Research Academy, Hyderabad, India from June-2017 to December 2020.
- Worked as Professor in Computer Science & Engineering department at Sri Venkateshwara College of Engineering, Bengaluru, India from May-2016 to May 2017
- Worked as Associate Professor in Computer Science & Engineering department at Kumaraguru College of Technology, Coimbatore, India from October – 2012 to May 2016.
- Worked as Assistant Professor in Computer Science & Engineering department at Kumaraguru College of Technology, Coimbatore, India from May -2010 to October -2012.
- Worked as Senior Lecturer in Computer Science & Engineering department at Kumaraguru College of Technology, Coimbatore, India from July-2005 to April-2010.
- Worked as Lecturer in Computer Science & Engineering department at Kumaraguru College of Technology, Coimbatore, India from August 2000 to June-2005.
- Worked as Lecturer in Computer Science & Engineering department at Maharaja Engineering College, Avinashi, India from June 1998 to August-2000.

EDUCATION:

- Ph.D (Computer Science and Engineering) at Anna University, Chennai, India in 2015.
- M. E. (Computer Science and Engineering) at Kumaraguru College of Technology, Anna University, Chennai, India in 2008 with 84% and I class with Distinction (First in Class).
- B.E. (Computer Science & Engineering) at Kongu Engineering College, Bharathiar University, India in 1998 with 71.5% and I class.

ONLINE COURSES COMPLETED

S.No.	Name of the Course	Conducted by
1	R Programming	Coursera
2	Introduction to Big data	
3	Introduction to Big data Analytics	
4	Hadoop platform and application framework	
5	Programming for everybody	
6	Python data structures	
7	Using Python to access web data	
8	Generative AI	
9	Using database with Python	
10	Data Science for engineers	NPTEL
11	Introduction to Machine Learning	
12	Large Language Models	

RESPONSIBILITIES:

In Addition to Teaching at Maharaja Engineering College, Avinashi

- Time table in-charge
- Lab In-charge

In Addition to Teaching at Kumaraguru College of Technology, Coimbatore

- BOS member at Kumaraguru College of Technology
- Department Advisory Board member for NBA
- Module Coordinator for NBA.
- Project Coordinator for ME (CSE) students.
- ME(CSE) syllabus formation committee members for three years.
- Class Advisor.
- Result analysis in-charge for two years.
- Association activities in-charge for one year.
- Timetable in-charge for four years.
- Lab in Charge for various laboratories.
- Counselor and core member for Information System Track introduced under CBCS regulation for M.E (CSE) course.
- CSE Dept. (P.G) exam coordinator for one year

In Addition to Teaching at Sri Venkateshwara College of Engineering, Bangalore

- NIRF department coordinator

- Autonomous status Coordinator
- Mini Project Coordinator
- Departmental Promotional Coordinator
- Department Research coordinator

In Addition to Teaching at Aurora’s Scientific, Technological and Research Academy, Hyderabad

- Rectified as Principal for Aurora Scientific Technological and Research Academy
- Coordinator (Research & Development)
- Certification Course Coordinator
- NAAC coordinator

In Addition to Teaching at Anurag University, Hyderabad

- Programme coordinator for Cyber Security Programme
- Coordinator (Research & Development)
- Magazine In-charge
- NBA Criteria incharge

MEMBERSHIPS:

- ISTE@(Life Member)
- ACCS* Life member

@ Indian Society for Technical Education, * - Advanced Computing and Communications Society

ACADEMIC PROJECTS:

- B. E. Degree: Online Banking Systems.
- M. E. Degree: Mining Ice-berg Query from Data Warehouse.
- Ph.D. Thesis: Service Oriented Data Federation with Quality of Service

ACADEMIC PROJECT GUIDANCE

- B.Tech – 40 Projects
- M.E (CSE) – 10 Projects

Ph.D GUIDANCE DETAIL

S.No.	No. of Students	Name of the University	Status
1	6	Visvesvaraya Technological University (VTU), Belgaum, Karnataka 590018	2 Student Completed, 4 Registered

QUALITY IMPROVEMENT PROGRAM ATTENDED:

1. Attended seminar on “Project Management & Communication” on 1.11.2001 at Kumaraguru College of Technology (KCT).
2. Attended “Faculty Development Programme” conducted by E2E at Kumaraguru College of Technology (KCT) 02.05.2002 to 10.05.2002.
3. Attended faculty development programme on “Performance and Security Issues in Computer Networks”, ISTE sponsored program conducted by Kumaraguru College of Technology, during 24.10.2002 to 26.10.2002.
4. Attended national conference on “Data Mining” during Dec 3rd and 4th, 2004 at KCT.

5. Attended one day workshop on Computer hardware dry assembly and networking conducted by Kumaraguru College of Technology on 19.03.2005.
6. Attended workshop on “Fundamentals of Programming Language” conducted by Infosys at VLB, Coimbatore.
7. Attended three days workshop on Pervasive Computing conducted by Kumaraguru College of Technology during 8.12.2005 to 10.12.2005.
8. Attended faculty Development programme on “Business Intelligence” conducted by Kumaraguru College of Technology, Coimbatore from 12.05.08 to 16.05.08
9. Attended workshop on “ Research Techniques in Data Mining and Warehousing” Conducted at SNS College of Technology, Coimbatore, during July 17-18, 2009
10. Participated in the International Conference on “Intelligent Design and Analysis of Engineering Products, Systems and Computation”, conducted at Krishna College of Engineering and Technology, Coimbatore, 9th and 10th July 2010.
11. Attended Workshop on “Open Source Communication and Collaboration Tools” held at United Institute of Technology, Coimbatore during 26th & 27th August, 2010.
12. Attended workshop on “Research Issues in Grid and Cloud Computing” at Kumaraguru College of Technology, Coimbatore on 19.11.2010 & 20.11.2010.
13. Participated Workshop on “Programming with PHP and MySQL using WAMP server” held at Kumaraguru College of Technology, Coimbatore during 10th - 14th December, 2010.
14. Attended international Conference on “Advances in Communication, Network and Computing” at Bangalore, during Mar 10-11, 2011.
15. Attended workshop on “Research Methodologies” at Kumaraguru College of Technology, Coimbatore, during 15-16, April 2011
16. Attended workshop on “WEKA” at Kumaraguru College of Technology, Coimbatore, 12th Nov 2011
17. Attended one-day national seminar on “Semantic information retrieval” at NIT Trichy, 30th Jan 2012.
18. Attended staff development programme on “CASE TOOLS” at Kumaraguru College of Technology, Coimbatore, during 7-11, April 2012.
19. Attended workshop on “Free Open Source Software and its Applications” at Kumaraguru College of Technology, Coimbatore, during 4-5, Oct 2013.
20. Attended training programme on “Rational Software Architect” at Kumaraguru College of Technology, Coimbatore, during 16-18, Dec 2013.
21. Attended TEQIP-II faculty development programme on “Evaluation and Relative Grading” at PSG College of Technology, Coimbatore, 28th Dec 2013.
22. Attended research promotion programme on “Statistical and mathematical modeling for computer science research” at Coimbatore Institute of Technology, Coimbatore, During 10-16 Feb 2014
23. Attended workshop on “Computational intelligence for security” at Kumaraguru College of Technology, Coimbatore, between 28.02.2014 and 1.03.2014.
24. Attended CSI sponsored workshop on “Writing Effective Research Papers and Drafting Winning Research Grant Proposals for Funding”, Kumaraguru College of Technology, Coimbatore, during 29th, Oct 2014.
25. Attended workshop on “Optimization techniques for solving multidisciplinary research problems in Engineering Sciences” at Kumaraguru College of Technology, Coimbatore, during 27th to 29th, April 2015.
26. Attended national workshop on “Data Science and Big data Analytics” at C-DAC, Bangalore, during 5th to 7th, August 2015.
27. Attended workshop on “Android App development” at Kumaraguru College of Technology, Coimbatore, on 30.01.2016.

28. Attended one FDP on “IoT applications using CC3200” at Kumaraguru College of Technology, Coimbatore, on 20.02.2016.
29. Attended seminar on “How to write research proposal” attended at Sri Venkateshwara College of Engineering, Bengaluru, 27th of Aug 2016.
30. Attended FDP on “IOT machine learning and virtualization” at Sri Venkateshwara College of Engineering, Bengaluru, during 16th to 20th of Jan 2017.
31. Attended FDP on Mathematics for Engineers at G.Narayanamma Institute of Technology and Science, Hyderabad during 18th to 23rd June 2018.
32. Attended FDP on Computing and Signal processing in IoT at QIS college of Engineering and Technology, Ongole, AP,during 23rd May to 27th May 2020.
33. Attended FDP on Artificial Intelligence and Machine Learning at Kumaraguru College of Technology, Coimbatore, Tamil Nadu during 9th to 13th March 2021.
34. Attended ninth international conference on “ Transformation in Engineering Education (ICTIEE-2022) organized by Indo Universal collaboration for engineering education during 7th to 9th Jan 2022.
35. Attended FDP on Artificial Intelligence and Machine Learning at Anurag University, Hyderabad, Telangana during 13th to 17th February 2023.
36. Attended FDP on Generative AI:Hands-on Learning from Concepts to Application from 3rd to 7th February 2025 conducted by RV institute of Technology and Management.
37. Attended online FDP on AI-based Image processing for Bio-medical Applications from 17th to 28th February 2025 jointly organized by Electronics and ICT Academy, NIT Patna and NIT Jamshedpur.
38. Attended online FDP on Empowering Research with High Performance Computing and GPU Technologies from 17th to 21st March 2025 conducted by RV college of Engineering, Bengaluru
39. Attended online FDP on OBE in the AI Era: Leveraging Technology for NIRF Excellence in Teaching- Learning from 26th to 30th June 2025 conducted by Nandha Engineering College, Erode, Tamil Nadu.
40. Attended a 5-day Faculty Development Program (FDP) on “Quantum Computing” from 19th to 23rd January 2026 at RV Institute of Technology and Management (RVITM), Bengaluru

QUALITY IMPROVEMENT PROGRAM CONDUCTED:

1. Organized national conference on “Service Oriented Computing” as joint Secretary in the department of CSE, Kumaraguru College of Technology, Coimbatore during 24th & 25th March 2011.
2. Worked as Staff coordinator for organizing the international conference on “Intelligent Interactive Systems and Assistive Technologies organized by department of IT, CSE and California State University Northridge on 2nd and 3rd of August 2013.
3. Arranged “Cloud Computing” Workshop for I M.E (CSE) students, Kumaraguru College of Technology, Coimbatore on April 7th 2014
4. Organized faculty development programme on “Big Data Analytics and Cloud Computing”, in Kumaraguru College of Technology, Coimbatore during 19th to 23rd May 2014
5. Arranged “Internet of Things” workshop for staff members in department of CSE, Kumaraguru College of Technology, Coimbatore, Nov 5th and 6th, 2015
6. Conducted workshop on “Python Programming” for students in Sri Venkateshwara College of Engineering, Bengaluru on 01.10.2016
7. Conducted “Inter College Mini Project Exhibition” for students, Sri Venkateshwara College of Engineering, Bengaluru on 8.11.2016

8. Conducted FDP on “IOT machine learning and virtualization” as program coordinator at Sri Venkateshwara College of Engineering, Bengaluru, during 16th to 20th of Jan 2017
9. Coordinated workshop Android development for students on 13.10.2017 to 14.10.2017 in Aurora’s Scientific, Technological and Research Academy, Hyderabad.
10. Coordinated the OCJP certification programme for third year CSE students in Aurora’s Scientific, Technological and Research Academy, Hyderabad ,2017.
11. Coordinated Microsoft certification programme on “Networking Fundamental” for third year CSE students in Aurora’s Scientific, Technological and Research Academy, Hyderabad, 2018.
12. Conducted initial round of Virtual reality and artificial intelligence for students as chief faculty coordinator in Aurora’s Scientific, Technological and Research Academy, Hyderabad during 19.03.2019 to 20.03.2019.
13. Conducted FDP on “Big Data Analytics” at Anurag University, Hyderabad during 4th to 8th of October 2021
14. Conducted 5 days FDP on Angular JS and Node JS at Sri Venkateshwara College of Engineering, Bengaluru during 16th to 20th October 2023
15. Conducted 5 days FDP on Power BI at Sri Venkateshwara College of Engineering, Bengaluru during 20th to 24th Nov 2023
16. Conducted 3 Days Workshop on C Programming at Sri Venkateshwara College of Engineering, Bengaluru during 20th July 2023 to 22nd July 2023
17. Conducted 3 Days workshop on Core Java Programming at Sri Venkateshwara College of Engineering, Bengaluru during 20th July 2023 to 22nd July 2023
18. Conducted 3 Days workshop on Web Development and Software Testing at Sri Venkateshwara College of Engineering, Bengaluru during 14th June to 16th June 2023
19. Conducted 3 Days Workshop on Web Development at Sri Venkateshwara College of Engineering, Bengaluru during 20th July 2023 to 22nd July 2023
20. Conducted Seminar on Global Awareness Program at Sri Venkateshwara College of Engineering, Bengaluru on 12/4/2023.
21. Conducted 5 days FDP on Full Stack Development at Sri Venkateshwara College of Engineering, Bengaluru during 29th April 2024 to 4th May 2024.
22. Conducted 5 days FDP on Generative AI:Hands-on Learning from Concepts to Application at RV institute of Technology and Management (RVITM), Bengaluru from 3rd to 7th February 2025
23. Conducted Gen-AI Bootcamp for students at RVITM, Bengaluru from 18th to 19th March 2025
24. Organized 4 day hands-on workshop on Deep Dive on Machine Learning at RVITM in collaboration with NIAS Bengaluru from 23rd to 26th April 2025.
25. Organized 3 days FDP on on AI in Engineering Education: Transforming Teaching, Learning, and Assessment at RVITM from 29th July to 31st July, 2025
26. Initiated and conducted a 5-day Faculty Development Program (FDP) on “Quantum Computing” from 19th to 23rd January 2026 at RV Institute of Technology and Management (RVITM), Bengaluru

PUBLICATIONS:

Journal Publications:

1. M.S.Hema, S.Chandramathi, “Federated Query Processing Service in Service Oriented Business Intelligence”, Computer networks and Information Technologies, Springer, 2011, vol.142, pp. 337-340. DOI: 10.1007/978-3-642-19542-6_62 (SCOPUS)

2. M.S. Hema, S. Chandramathi, "Review on Ontology based Data Federation", International Journal of Research and Reviews in Computer Science (IJRRCS), Science Academy Publisher, United Kingdom, 2012, Vol. 3, pp.1508-1513
3. Hema M S, Chandramathi S, "Service Oriented Ontology Based Data Federation for Heterogeneous Data Sources", Journal of Theoretical and Applied Information Technology, 2013, Vol.55, Issue No. 1, pp.126-136 (SCOPUS)
4. M.S. Hema, S. Chandramathi, "Quality Aware Service Oriented Ontology Based Data Integration", WSEAS Transactions On Computers, 2013, vol. 12, issue 12, pp.463-473 (SCOPUS)
5. Devini.k, M.S Hema, "Ontology Based Data Integration with User Feedback", In International Journal of Scientific & Engineering Research, volume 5, issue 2, February-2014 ISSN 2229-5518
6. Saranya, K, Hema, MS, Chandramathi, S, "Data Fusion in Ontology based Data Integration", 2014,IEEE Xplore, pp. 1-6 DOI: 10.1109/ICICES.2014.7033792 (SCOPUS)
7. Sowmya Devi L, Jai Barathi B, Hema M.S. and S. Chandramathi , "A Survey: Different Approaches to Integrate Data Using Ontology and Methodologies to Improve the Quality of Data", International Journal of Computer Sciences and Engineering, 2014,vol-02, Issue-11, pp.126-131
8. Jaibarathi B, Sowmya Devi L, Hema M S , Dr. S. Chandramathi, "A Survey: Different Approaches for Building Ontology and Algorithms used in Cache Optimization", international Journal of Engineering Research & Technology (IJERT), 2014, Vol. 3 Issue 11,pp. 1659-1664
9. M.S. Hema, S.Chandramathi, L. Sowmya Devi B. and Jaibarathi, "Data Fusion Using Ontology To Enhance Data Quality With Cache" International Journal of Applied Engineering Research, 2015, Vol.10, pp.13685-13695
10. Pravithra CNS, Hema MS, Sumathi VP, "A Survey: Approaches to Enhance the Data Integration using Ontology and Methodologies to Improve Data quality", International Journal for Scientific Research & Development| 2015 vol.3, Issue:05, pp.1485-1491.
11. Kiruthika B, Hema.M.S "Exploration of Association Rules", International Journal of Scientific & Engineering Research, Volume 7, Issue 3, March-2016, pp. 30-34
12. Kiruthika B, Hema.M.S "Exploration of Association Rules By Applying Automated Cogency" International journal of scientific engineering and research, volume 7,issue 3,march 2016.
13. Hema M S , Nageswara Guptha M, "Data fusion in data federation using modified discriminative Markov logic networks", International Journal of Advanced and Applied Sciences, 2016, Vol.3, Issue 8, pp.78-84, DOI: 10.21833/ijaas.2016.08.013 (ESCI)
14. Hema M.S., Maheshprabhu R., Nageswara Guptha M. (2018) Data Access in Heterogeneous Data Sources Using Object Relational Database. In: Venkataramani G., Sankaranarayanan K., Mukherjee S., Arputharaj K., Sankara Narayanan S. (eds) Smart Secure Systems – IoT and Analytics Perspective. ICIIT 2017. Communications in Computer and Information Science, vol 808. pp. 23-33 Springer, Singapore. DOI : https://doi.org/10.1007/978-981-10-7635-0_3 (SCOPUS)
15. Hema M S, Nageswara Gutpha M and Prema Arokia Mary, "An Efficient Approach for Analyzing and Improving Data Quality in Data Integration", International Journal of Pure and Applied Mathematics Vol.116 No. 12,pp.107-115, 2017 Doi: 10.12732/ijpam.v116i12.12 (SCOPUS)
16. S.Kanagaraj, G. Prema Arokia Mary, M. S. Hema, "Helping Hands - Anthropomorphic Robot Hand", Indian Journal of Scientific Research Vol.17 (2), pp. 168-171, 2018

17. R.Kalaiselvi, V.P.Sumathi, M.S.Hema, "Universal Platform for Heterogeneous Mobile Applications to Retrieve Information", *Indian Journal of Scientific Research*. Vol.17 (2), pp. 177-180, 2018
18. Lokesh A, Hema M S, Nageswara Guptha, "Structure for Analyzing and Detracting Negative Emotional Contamination in Online Social Networks", *Indian Journal of Scientific Research*. Vol.17(2): pp.183-189, 2018
19. R.Maheshprabhu, M S Hema, M.Nageswara Guptha, "ICT Solution to Small and Medium Scale Enterprises in India for Effective Business Management", *Indian Journal of Scientific Research*. Vol.17 (2), pp. 547-550, 2018
20. M S Hema, R Maheshprabhu, S Shalini, "Parkinson's Disease - A Survey", *Indian Journal of Scientific Research*. Vol.17 (2), pp. 584-587, 2018
21. Hema M S, Srilatha Chepure and Maheshprabhu R, "Duplicate detection and completeness approach for end users' data quality improvement in data federation" *International Journal of Pure and Applied Mathematics*, Vol.119 No. 16 2018, pp.5473-5483, 2018
22. R. Maheshprabhu, M.S Hema, G. Prema Arokia Mary, "Information System for Performance Improvement of Small and Medium Scale Enterprise" *International Journal of Recent Technology and Engineering (IJRTE)*, Vol.-7 Issue-4S2, pp. 407-411,2018 (SCOPUS)
23. S. Kanagaraj, M.S. Hema, M. Nageswara Gupta, "Environmental Risk Factors and Parkinson's Disease – A Study Report" *International Journal of Recent Technology and Engineering*, Vol.-7 Issue-4S2, pp. 412-41,2018 (SCOPUS)
24. Gnaneshwari, G.R., Hema, M.S, "Privacy in pervasive computing environment" *International Journal of Recent Technology and Engineering*, Vol.-8 Issue-4S3, pp. 2277-3878, July 2019, <https://doi.org/10.35940/ijrte.B1173.0782S319> (SCOPUS)
25. Prema Arokia Mary, G., Suganthi, N., & Hema, M. S. (2019). A recapitalization on crypto jacking and end to end analysis of ransomware attacks. *International Journal of Engineering and Advanced Technology*, 8(6 Special Issue 3), 1582–1586. <https://doi.org/10.35940/ijeat.F1291.0986S319> (SCOPUS)
26. Kanagaraj, S., Hema, M.S., Nageswara Gupta, M. "Machine learning techniques for prediction of Parkinson's disease using big data", *International Journal of Innovative Technology and Exploring Engineering*, Volume 8, Issue 10, August 2019, Pages 3788-3791. DOI: 10.35940/ijitee.I9977.0881019 (SCOPUS)
27. R Mahesh Prabhu, M S Hema, Srilatha Chepure, Nageswara Guptha, "Logistics Optimization in Supply Chain Management using Clustering Algorithms" , *International Journal of Scalable Computing: Practice and Experience*, Volume 21, Issue 1, 2020, pp. 107–114, DOI 10.12694:/scpe.v21i1.1628 (SCOPUS)
28. Kanagaraj, S., Hema, M. S., & Nageswara Gupta, M., "Normalisation and dimensionality reduction techniques to predict parkinson disease using ppmi datasets", *Oxidation Communications*, 43(1), 2020, 117–134.(SCOPUS)
29. G.Prema Arokia Mary, N.Suganthi, M.S.Hema, M.Hari Dharshini, K.Vaishaali, M.Monika Sri, "Predicting Metamorphic Changes In Parkinson's Disease Patients Using Machine Learning Algorithms", *Journal of Bioscience Biotechnology Research Communications*, Special Issue Vol 13 (11) 2020,Pp-147-152 (SCIE) <http://dx.doi.org/10.21786/bbrc/13.11/30>
30. Pampapathi, B.M., Nageswara Guptha, M., Hema, M.S. Data distribution and secure data transmission using IANFIS and MECC in IoT. *Journal of Ambient Intelligence and Humanized Computing* (2021), Springer. <https://doi.org/10.1007/s12652-020-02792-4>, (SCIE), impact factor (4.59)

31. Pampapathi B M, Nageswara Guptha M, M S Hema, "Malicious Node Detection and Energy-aware Optimal Routing in Wireless Sensor Networks using CD-LVQ and BMSSO Algorithms" Journal of Huazhong University of Science and Technology, Vol. 50 (3), 2021 pp. 1-17. <https://app.box.com/s/nvzky510hykqnv4gkr3o17ypu3yj0z8m>
32. Mahantesh, H.M., Nageswara Guptha, M. & Hema, M.S. "Optimized Path and Reduced Rule Caching Cost for Software Defined Network (SDN) Based Internet of Things (IOT)". Wireless Pers Commun **120**, 2349–2365 (2021). (WoS) <https://doi.org/10.1007/s11277-021-08698-4>
33. Shivaprakash Ranga, Dr. Nageswara Guptha M, Dr. Hema M S, "A Survey on Automatic Abnormalities Monitoring System for Log Files using Machine Learning", Turkish Online Journal of Qualitative Inquiry (TOJQI) Vol.12, Issue 6, July, 2021 pp. 8386-8393
34. Prema Arokia Mary G, Suganthi N, Hema M S, "A Critical Review on Parkinson's Disease Due to Pesticide Exposure", Strad Research, Vol. 8, Issue 5, 2021, pp:600-604
35. G.R., Gnaneshwari., Hema, M.S. and Lingareddy, S.C. (2021), "Authentication-based access control approach for enhancing security in pervasive computing environments", International Journal of Pervasive Computing and Communications, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/IJPC-02-2021-0044> (WoS)
36. M S, Hema., Niteesha Sharma, Y Sowjanya, Ch. Santoshini, R Sri Durga, & V. Akhila. (2021). Plant disease prediction using convolutional neural network. EMITTER International Journal of Engineering Technology, 9(2), 283-293. <https://doi.org/10.24003/emitter.v9i2.640> (WoS)
37. Pandimurugan, V., D. Usha, M. Nageswara Guptha, and M. S. Hema (2021). "Random forest tree classification algorithm for predicating loan." Materials Today: Proceedings (Scopus).<https://doi.org/10.1016/j.matpr.2021.12.322>
38. Prema Arokia Mary, G., N. Suganthi, and M. S. Hema. (2021) "Early Prediction of Parkinson's Disease from Brain MRI Images Using Convolutional Neural Network." Journal of Medical Imaging and Health Informatics, Vol.11, Issue no. 12, pp:3103-3109. <https://doi.org/10.1166/jmih.2021.3897>
39. N. Arunkumar, V. Pandimurugan, M. S. Hema, H. Azath, S. Hariharasitaraman, M. Thilagaraj, Petchinathan Govindan, "A Versatile and Ubiquitous IoT-Based Smart Metabolic and Immune Monitoring System", Computational Intelligence and Neuroscience, vol. 2022, Article 9441357, 11 pages, 2022. <https://doi.org/10.1155/2022/944135>
40. M. Thilagaraj, B. Dwarakanath, V. Pandimurugan, P. Naveen, M. S. Hema, S. Hariharasitaraman, N. Arunkumar, Petchinathan Govindan, "A Novel Intelligent Hybrid Optimized Analytics and Streaming Engine for Medical Big Data", Computational and Mathematical Methods in Medicine, vol. 2022, Article ID 7120983, 11 pages, 2022. <https://doi.org/10.1155/2022/7120983>
41. Pampapathi, B. M., Nageswara Guptha, and M. S. Hema. "Towards an effective deep learning-based intrusion detection system in the internet of things." Telematics and Informatics Reports 7 (2022): 100009.
42. Hema, M. S., R. Maheshprabhu, K. Sudheer Reddy, M. Nageswara Guptha, and V. Pandimurugan. "Prediction analysis for Parkinson disease using multiple feature selection & classification methods." Multimedia Tools and Applications Volume 82, pages 42995–43012, (2023) <https://doi.org/10.1007/s11042-023-15280-6> (WoS, Q1)
43. Mahantesh, H.M., Guptha, M.N. & Hema, M.S. Energy–QoS-Aware Data Communication and Optimal Path Selection in Software-Defined Networks Using EOMBA and IBSO. SN COMPUT. SCI. 4, 813 (2023). <https://doi.org/10.1007/s42979-023-02253-7>. (Wo, Q2)
44. Kanagaraj, S., Hema, M.S. & Guptha, M.N. Optimized supervised learning approach to predict Parkinson's disease with minimal attributes using PPMI Datasets. Multimed Tools

- Appl Volume 83, pages 48499–48520 (2024). <https://doi.org/10.1007/s11042-023-17582-1> (WoS, Q1)
45. HM, Mahantesh, Nageswara Guptha M, and Hema MS. "QoS based Optimal Path Selection Using Adaptive Sparse Bayesian Find-Fix-Finish-Exploit-Analyze Based Extreme Learning Machine for SDN based IoT Networks." *International Journal of Intelligent Engineering & Systems* 16.5 (2023).
 46. Kanagaraj, S., M. S. Hema, and M. Nageswara Guptha. "An improved approach for early diagnosis of Parkinson's disease using advanced DL models and image alignment." *Automatika* 65.3 (2024): 911-924. <https://doi.org/10.1080/00051144.2023.2284030> (WoS, Q2)
 47. Bama, S., Hema, M. S., Esakkirajan, S., & Nageswara Guptha, M. (2025). A Hierarchical Transformer Network With Label Attention For Personality Prediction By MBTI Classification. *Applied Soft Computing*, 178, 113267. <https://doi.org/10.1016/j.asoc.2025.113267>. (WoS, Q1)
 48. Hema, M. S., Sharmila, V. C., Pandimurugan, V., Rajendran, R., & Kirubha, D. (2026). Gastro-intestinal disease detection and classification using Taylor spotted hyena optimization algorithm enabled deep maxout networks. *Biomedical Signal Processing and Control*, 116, 109523. <https://doi.org/10.1016/j.bspc.2026.109523> (WoS, Q1)

Conference Publications:

1. Hema.M.S , "E-Cultivation using Data Mining", Second national conference on data mining, PSNA College of Engineering & Technology, Dindigul, 4th april 2006
2. Hema M.S, Mr. V. Vijilesh, "Mining Iceberg Cubes from Data Warehouse," Fourth National Conference on Advances in Computer Engineering and Networking ACENET'08, PSNA College of Engineering & Technology, Dindigul, 15th March 2008.
3. Sujatha R, M.S. Hema "Data Federation Service – Oriented Architecture", Third National Conference on Networks, Intelligence and Computing Systems NCNICS, SNS College of Technology, Coimbatore, 16th February 2009
4. R.Kalaiselvi, M.S.Hema "Query Decomposition : Overview on bottom up approach to improve XML query processing" , National conference on distributed computing, KCT, Coimbatore, 29th and 30th of Jan 2010
5. T.Veni, M.S.Hema, "A Research On Automatic Web Services Composition And Optimization Based On Qos" , National Conference on Service Oriented Computing, NASOC 2011, KCT, March 24th -25th, 2011
6. Ms.Priya, M.S.Hema, " Ontology based data integration" National Conference on Wireless sensor networks 2012, KCT, March 23th -24th, 2012
7. S. Leela, M.S. Hema "Accuracy optimization for high dimensional data using dencos algorithm", 3rd national conference on innovations in information technology (NCIIT) Bannari Amman Institute of Technology, 24 and 25 February 2012
8. S.Leela, M.S. Hema, "Density conscious subspace clustering for high dimensional data", 6th national conference on networks, intelligence and computing systems (NTCS), SNS college of technology, 16th February 2012
9. B. Dharani Pathi, M.S Hema, "Data Quality in Data Integration", In Fourth National Conference on Innovations in Information Technology (NCIIT 2013) Bannari Amman Institute of Technology, 21st February 2013.
10. D.Saravanakumar, M.S. Hema, "Storing Ontology in Object Relational Database", Fifth International Conference Advances in Computer and Communication, Sun College of Engineering and Technology, 18th February 2013.
11. K.Saranya, M.S Hema, S. Chandramathi "Data Fusion in Ontology based Data Integration", In Fourth IEEE international Conference on Information Communication and

- Embedded Systems(ICICES 2014) at S.A Engineering College, 27th and 28th February 2014.
12. Hema.M.S, S.Chandramathi “Data federation with quality of service using Markov Logic Networks” International Conference on Electrical, Instrumentation and Communication at Sri Krishna College of Technology, Coimbatore, 2nd and 3rd, January 2015
 13. Jaibarathi, L. Sowmya Devi, M.S. Hema, “Ontology Based Data Integration To Improve Data Quality With Cache” 16th IRF International Conference Pune, India, December 2014, , ISBN: 978-93-84209-74-2
 14. M.S. Hema, S.Chandramathi, L. Sowmya Devi B. and Jaibarathi, “Data Fusion Using Ontology To Enhance Data Quality With Cache” International Conference on Applied Research and Engineering management, 27th and 28th, Feb 2015
 15. Pravithra C.N. S, Hema M.S, “Improvisation of quality of data using classification by handling missing values for the numerical data”, National Conference 18th March 2016, Adithya Institute of Technology, Coimbatore
 16. Pravithra C.N. S,. Hema M.S, “Improvisation on quality of data by handling missing values” National Conference 26th March 2016, Velalar college of Engineering and Technology, Erode.
 17. Pravithra C.N.S,.Hema M.S, “Improvisation on quality of data by handling missing values for mixed attribute data sets” in International Conference 4th and 5th April 2016, Alagappa University, Karaikudi.
 18. M.S. Hema, M.Nageswara Guptha, “ Service Oriented quality Driven Ontology based Data Federation with User Feedback”, in 2nd IEEE International Conference for Convergence in Technology, Pune, 7th to 9th of April, 2017.
 19. Guruprasad Y K, Nageswara Guptha M, Hema M S, “Peer to Peer Communication Between the Autonomous Vehicles Using Virtual Private Network”, Proceedings of the First International Conference on Computing, Communication and Control System, I3CAC 2021, 7-8 June 2021, Bharath University, Chennai, India. DOI: 10.4108/eai.7-6-2021.2308857
 20. S. Kanagaraj, M. S. Hema and M. N. Guptha, "Performance analysis of Classification methods for Parkinson’s Disease with PPMI Dataset," 2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), 2021, pp. 1-5, doi: 10.1109/ICAECA52838.2021.9675588 (IEEE)
 21. G. Prema Arokia Mary, M. S. Hema, R. Maheshprabhu and M. Nageswara Guptha, "Sentimental Analysis of Twitter Data using Machine Learning Algorithms," 2021 International Conference on Forensics, Analytics, Big Data, Security (FABS), 2021, pp. 1-5, doi: 10.1109/FABS52071.2021.9702681.
 22. Hema M S, Sowjanya, Niteesha Sharma and et. al.” Identification and Classification of Brain Tumor using Convolutional Neural Network with Autoencoder Feature Selection”, International Conference on “Emerging Technologies in Computer Engineering, Springer, 2022.
 23. P. A. Mary G, Hema. M. S, Nageswara . Guptha. and etal. "A Machine Learning Approach to Detect Parkinson Disease Using Speech Signals," 2022 *International Interdisciplinary Humanitarian Conference for Sustainability (IIHC)*, Bengaluru, India, 2022, pp. 240-244, doi: 10.1109/IIHC55949.2022.10060407.
 24. M. S. Hema, R. Maheshprabhu, M. Nageswara Guptha, P. A. Mary G and A. Sharma, "Prediction of Parkinson Disease using Autoencoder Convolutional Neural Networks," 2022 *International Interdisciplinary Humanitarian Conference for Sustainability (IIHC)*, Bengaluru, India, 2022, pp. 236-239, doi: 10.1109/IIHC55949.2022.10060292.

25. Kanagaraj, S., M. S. Hema, M. Nageswara Guptha, and V. Namitha. "Detecting Parkinson's Disease with Image Classification." In 2022 IEEE 3rd Global Conference for Advancement in Technology (GCAT), pp. 1-5. IEEE, 2022.
26. Hema, M. S., Bama, S., & Guptha, N. (2025, March). Comparing Deep Reinforcement Learning Methods for HVAC System Optimization with Forecast Parameters Over Various Time Periods. In 2025 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI) (Vol. 3, pp. 1-6). IEEE.
27. Hasini, R., Shree, S.C., Ahmed, I., Gagandeep, C.M., Hema, M.S. (2025). Comparative Analysis for Detection of Breast Cancer Using Machine Learning and Convolutional Neural Network (CNN). In: Shukla, P.K., Bhatt, A., Mittal, H., Engelbrecht, A. (eds) Computer Vision and Robotics. CVR 2024. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-97-8868-2_38
28. Vishruth Ramesh , Hema M S, Vamshik Shetty R, Rahul M , Sankalp S, " SavvyAI : AI Enhanced Personalized Career Guidance System", 5th International Conference on Intelligent Technologies (CONIT) Karnataka, India. June 20-22, 2025.
29. V. R Tejas, N. R Venkatesh Raju, S. Ganiga, S. Sayeed, H. M S and R. Shailendra, "Lightweight Multi-Modal Ensemble Framework for Parkinson's Disease Detection," 2025 9th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India, 2025, pp. 1-6, doi: 10.1109/CSITSS67709.2025.11295039.
30. M. T.S, N. Patil, M. D.B, P. S R, R. S and H. M S, "EdgeLearn: RAG-Based Textbook Query System for Edge Devices," 2025 9th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS), Bangalore, India, 2025, pp. 1-5, doi: 10.1109/CSITSS67709.2025.11294547.
31. D. Solanki, A. B A, G. Jayan, B. Nikitha, H. M S and R. Shailendra, "Biomarker-Based Prediction of Parkinson's Disease Onset Using Machine Learning," 2025 First International Conference on Intelligent Computing and Communication Systems (CICCS), Bengaluru, India, 2025, pp. 1-6, doi: 10.1109/CICCS66437.2025.11280092.
32. K. H K, D. L. Paavanaa, A. S. M, A. V R, H. M S and R. S, "Evaluating the Effectiveness of Machine Learning Models Across Diverse Parkinson's Disease Datasets," 2025 First International Conference on Intelligent Computing and Communication Systems (CICCS), Bengaluru, India, 2025, pp. 1-6, doi: 10.1109/CICCS66437.2025.11280286.

INTERNATIONAL CONFERENCE SESSION CHAIR

- Session chair for second international conference on "Recent Innovations in Engineering and Technology (ICRIEAT 2017), Aurora's Scientific, Technological and Research Academy, Hyderabad during 21st and 22nd Dec 2017
- Session chair for international conference on "Science, Engineering Technology and Management, Kumaraguru College of Technology, Coimbatore, during 10th to 12th June 2018
- Session chair for international conference on "Advances in Electrical, Electronics, Communication, Computing and Automation organized by Kumaraguru College of Technology, Coimbatore, technically co-sponsored by IEEE during 8th to 9th October 2021
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REVIEWER

- Paper reviewer in International Journal of Computers, Communications, Control (IJCCC) Print ISSN-L 1841-9836; Online ISSN 1841-9844;
- Paper reviewer in Journal of Software Engineering and Knowledge Engineering ISSN (print): 0218-1940 | ISSN (online): 1793-6403
- Paper reviewer in Journal of Sensor Review ISSN: 0260-2288
- Paper reviewer in Canadian Journal of Electrical and Computer Engineering ISSN-0840-8688
- Paper reviewer in Advances in Science, Technology and Engineering Systems Journal ISSN: 2415-6698
- Paper reviewer in Scalable Computing: Practice and Experience ISSN: 1895-1767
- Paper reviewer in *Connection Science* Print ISSN: 0954-0091 Online ISSN: 1360-0494
- Paper reviewer in Canadian Journal of Electrical and Computer Engineering

FUNDING PROJECT COMPLETED

- Received 5 lakhs grant for young scientist seed money from Vision Group on Science and Technology (VGST), Karnataka, 2016 for the proposal titled “Parkinson Disease Analysis using Big Data”

FUNDING PROJECTS APPLIED:

- Proposal Titled, “Enhancing Security of WSN using Intrusion detection mechanisms” , submitted to DRDO, 2013
- Proposal Titled, “Building Scalable Real Time Botnet Detection Framework for Cyber-Security”, submitted to Naval Research Board (NRB), DRDO, 2015.
- Proposal Titled, “Data Federation with Quality of Service”, submitted to Science and Engineering Research Board (SERB), 2016.
- Proposal Titled “Prediction of Parkinson’s disease and its cause using machine learning techniques” department of Biotechnology Ministry of Science and Technology, Government of India, 2019.
- Proposal titled “Prediction of Parkinson Disease using Multi Model Deep Learning Approach with Feature Selection” SERB, 2021 (March).
- Proposal titled “Prediction of Parkinson Disease using Computer Vision” Vision Group on Science and Technology (VGST), Karnataka VRN/000169/22-23 (2023).
- Title: Gen-NeuroPD: An Autonomous Multilingual Multi-Agent System leveraging Biomarker-Driven Multi-Modal Learning for Early Detection, Stage Assessment, and Personalized Intervention in Parkinson’s Disease, agency : ICMR Submission date : April 2025
- Title : PaedRxNet: AI-Driven Multimodal Imaging Framework for Early Therapeutic Response Optimization in Pediatric Brain Disorders Agency : ANRF Date : July 2025, Ref No. [ANRF/AISE/2025/000084/AISSAI](#)
- Title : PaedRxNet: AI-Driven Multimodal Imaging Framework for Early Therapeutic Response Optimization in Pediatric Brain Disorders Agency : ANRF Date: Nov 2025 Ref No: [ANRF/ARG/2025/000518/ENS](#)
- Title : NIDAN-AI Framework (Neurological and Integrated Disease Analytics Network – AI enabled) Agency : ICSSR, Date : Dec 2025, Ref. No. ICSSR-RMM-2025-1421

THESIS EVALUATED

- Title: Healthcare and Social Event Analysis Using Data Mining Techniques, Anna university, Chennai and Viva Completed on 27.08.2018

PATENT GRANTED

- Title: Aquarium / Aqua culture pond to aquaponics convertor for indoor and outdoor farming/ gardening published on 24.08.2018(Patent No. 201841031047 A, Journal No.34/2018)
- Title: AI Based Cyber Attack Detection Device, Granted on April 2025.
- Autonomous crop irrigation Robot Design No. : 449832-001, date of issue : 21.06.25
- AI Enabled Device for Detection of Neurological Disorders Design No. : 452949-001, date of issue : 30.07.25

SEMINARS DELIVERED:

- Handled DBMS classes for Wipro recruited students' "Talent Transfer" during May 2005.
- Handled DBMS classes for Wipro recruited students' "Talent Transfer" during May 2011.
- Placement Training Classes for final year and third year students.
- Evolution of Database Management System and Data Mining for IT students of Ranganathan College of Engineering, Coimbatore in 2010.
- Data Warehousing using Top-Down Approach and Business Intelligence for faculty members at Sri Krishna College of Engineering and Technology, Coimbatore in 2013.
- Service Oriented Data Federation with Quality of Service for faculty members at Sri Krishna College of Technology, Coimbatore in 2015.
- Introduction to Operating Systems for II-year IT students at Kumaraguru College of Technology, Coimbatore in 2013.
- Introduction to Python programming for III year students at Sri Venkateshwara College of Engineering, Bengaluru in 2016.
- Delivered lecture on "Introduction to Big Data Analytics" in Faculty Development Programme at Sri Venkateshwara College of Engineering, Bengaluru in 12th June 2016.
- Delivered lecture on "Python Programming" for students at East West College of Engineering Yelahanka, Bengaluru, 16th Feb 2017.
- Delivered Seminar on Autonomous awareness to all HoD's of Sri Venkateshwara College of Engineering, Bengaluru on 18.02.2017.
- Delivered lecture on "Python Programming" in Faculty Development Programme at Kumaraguru College of Technology, Coimbatore on 26th of June 2017.
- Delivered lecture on "Deep learning – Basics and Algorithms" AICTE sponsored FDP at MVJ College of Engineering Bangalore on 6th March 2021
- Delivered lecture on "Artificial Neural Networks and Deep Learning" Artificial Intelligence and Machine learning FDP at School of Computer Science, PPG Arts and Science College, Coimbatore, Tamil Nadu on 2nd July 2021
- Delivered lecture on "Artificial Intelligence and Machine Learning" FDP at Sri Ranganathar Institute of Engineering and Technology, Coimbatore Tamil Nadu on 23.02.2023

ACCREDITATION AND OBE

- Part of NAAC working committee (2015-16) in Kumaraguru College of Technology, Coimbatore
- NBA overall Coordinator (2015-16) under Outcome-Based Education in Kumaraguru College of Technology, Coimbatore

- Attended Workshop on Quality Initiative in Technical Education Institutions (in Compliance with NBA and NAAC accreditation) at ESCI Hyderabad, during 6th to 8th Dec 2016.
- Conducted two-day workshop on “Preparation for NBA” at Government College of Engineering, Trivandrum from 13th Jan 2017 to 14th Jan 2017
- Conducted two-day workshop on “Preparation for NBA” at Thiagaraja Polytechnic College, Salem from 17th Mar 2017 to 18th Mar 2017
- Resource person for “Outcome Based Education” NBA workshop at Galgotias University Greater Noida, Gautam Buddh Nagar, Uttar Pradesh, India, 14th to 18th Dec 2017.
- Mentor for the workshop on “Outcome based education and NBA Accreditation” at CBT,IST,Dept. JNTU Hyderabad, 25th to 27th July 2018.
- Auditor on NBA Accreditation mock audit at CBT,IST,Dept. JNTU Hyderabad, 11th October 2018
- Department Advisory Board(DAB) member in the academic year 2018-19,2019-2020 and 2020-2021 at Kumaraguru College of Technology, Coimbatore
- Resource person for “Outcome Based Education” NBA workshop at Government Engineering College, Raipur, 13th December 2019.
- Delivered Lecture on “Defining outcomes using revised Bloom’s taxonomy” under Sage talk series on 26th July 2020 conducted by Sage University, Bhopal
- Delivered Lecture on “Course Outcomes writing and CO-PO mapping” in Faculty Development Programme conducted by Thiagaraja Polytechnic College, Tamil Nadu from 10th Aug 2020 to 14th Aug 2020
- Delivered Lecture on “Direct and indirect tools for assessment” in OBE and SAR –Preparation guideline for Poly Technic Teachers, AICTE sponsored Faculty Development Programme conducted by Thiagaraja Polytechnic College, Tamil Nadu 20th November 2020 and 19th December 2020
- Delivered Lecture on “Curriculum Design” in OBE and SAR –Preparation guideline for Poly Technic Teachers, AICTE sponsored Faculty Development Programme conducted by Thiagaraja Polytechnic College, Tamil Nadu 21th November 2020 and 23rd December 2020
- Delivered Lecture on “Blooms Taxonomy and Defining Course Outcomes” in Examination reforms, FDP under AICTE Margdarshan Scheme conducted by Bhilai Institute of Technology, Drug, Chhattisgarh, 8th and 9th of March 2021
- We received accreditation in the Department of Computer Science and Engineering (CSE) from 2023 to 2026 under my leadership.

OUTREACH PROGRAM CONDUCTED

- Conducted an **Outreach Program for 8th, 9th, and 10th grade students on 20.02.2026 at Sri Raghavendra High School, No. 44, Moodalapalya, Nagarabhavi Main Road, Bengaluru – 560072.**

EXTRA-CURRICULAR:

- Won prizes in athletics at school level
- Active participation in college sports day

AWARDS / ACHIEVEMENTS:

- Best project award in 2008.
- Gold medalist in PG, 2008.
- Best paper award in 2015.
- Outstanding achievement award in 2018 from ASTRA

MY STRENGTHS:

- Adhere rules and regulations of organization.
- Adaptable to any environment.

- Self-Motivated.
- Quick learner.
- Easily approachable.
- Good team player.

PERSONAL DETAILS:

Name : M. S.Hema
Fathers Name : S.M.Subramani
Age : 43
Date of Birth : 30-05-1977
Sex : Female
Marital status : Married
Nationality : Indian

REFERENCES:

Dr. P.Devaki,
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Department of Computer Science and Engineering

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Coimbatore- 641006,
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Dr.R.Maheshprabhu
Principal,
Aurora's Scientific & Technological Institute,
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Telangana 501301.
India.
Mobile : 9842537699

DECLARATION

I hereby declare that Information given above is true to best of my knowledge.

[M. S. Hema]