

**Name** : Dr.R.HEPZIBA GNANAMALAR

**Designation** : Assistant professor

**Department** : Bachelor of Computer Applications (BCA)

**Qualification** : BCA., MCA., Ph.D.,

**Experience** : Teaching - 11 Years

**Research** : 2 Years

**Area of Specialization(s)** : Artificial intelligence, Machine Learning, Image Processing

**Email** : rhepziba@gmail.com



### Academic Qualifications

Degree	Branch	Institution/University Name	Year of Graduation
Ph.D.	Computer Science	Bharathiar University	2022
M.C.A	Computer Application	Karunya university	2011
B.C.A	Computer Application	VLB Janakiammal College of Arts and Science	2008

### Additional Qualifications

Diploma/ Vocational/ Certification	Area of Specialization	Institution/University/Agency Name	Year
Certification	Cloud Infrastructure and Services	EMC <sup>2</sup>	2015

### Research Publications (Indexed)

1. R.HepzibaGnanamalar, C.Janani, T.Devi, “**Knowledge Acquisition Techniques and Tools: A Review**”, International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS) ISSN (Online): 2279-0055, ISSN (Print): 2279-0047, 2012.
2. R.HepzibaGnanamalar, T.Devi, “**Web Based Tool for Teaching Image Processing Using Knowledge Management and Collaborative Learning**”, American International Journal of Research in Science, Technology, Engineering & Mathematics, ISSN(Print):2328-3491, ISSN(Online): 2328-3580, ISSN(CD-ROM): 2328-3629, Issue 10, March-May, 2015.
3. R.Hepziba Gnanamalar, Dr.T.Devi, “**A Periodical Review On Image Processing Applications For Agriculture Development**”, International Journal of Research and Analytical Reviews (IJRAR), E-

ISSN 2348-1269, P- ISSN 2349-5138, Volume 5 | Issue 4 | Impact Factor: 5.75, Page No : 367-371, December 2018 (**UGC Approved**).

4. R.Vani, R.HepzibaGnanamalar, “**Deep Learning AI : Perspectives and Future Outlook**”, International Conference on Advanced Computing and Communication Systems - ICACCS , IEEE ISBN No: 978-1-5090-4558-7, January 2017.
5. R.Vani, R.Hepziba Gnanamalar, "**Perspectives And Future Outlook of Deep Learning AI**", International Journal of Modern Trends in Engineering & Research, ISSN(ONLINE): 2349-9745, ISSN(Print): 2393-8161, Volume 4, Issue 11; November 2017, DOI:10.21884/ijmter.2017.4349.pqhil, Corpus ID: 250703506 (**UGC Approved**).
6. R.Hepziba Gnanamalar, Dr.T.Devi, ‘**A Novel Algorithm to the Design and Development of Lemon Leaf Fungal Disease Grading and Area Detection in Smartphones using Image Segmentation**’, ‘International Journal of Recent Technology and Engineering (IJRTE)’, ISSN: 2277-3878 (Online), Page No.: 2926-2930 , Volume-8 Issue-2, July 2019. (**UGC Care List & Scopus Elsevier Indexed**).
7. R.Hepziba Gnanamalar, Dr.T.Devi, "**Lemon Leaf Fungal Disease Grading using Image Segmentation based on Pixel Intensity Transformation in Android Smartphone Platform: A Novelty and Review**" , International Journal of Scientific & Technology Research, ISSN : 2277-8616, Volume 8 , Issue, September 2019 (**UGC Care List & Scopus Elsevier Indexed**).
8. R.Hepziba Gnanamalar, Dr.T.Devi, “**A Periodical Review On Image Processing Applications For Agriculture Development**”, International Journal of Research and Analytical Reviews (IJRAR), E-ISSN 2348-1269, P- ISSN 2349-5138, Volume 5, Issue 4, Impact Factor: 5.75, Page No : 367- 371, December 2018 (**UGC Approved**).
9. P.Sharmila, R. Hepziba Gnanamalar, “**Empirical Analysis of Delay Avoidance and Routing Performance Improvement over Delay Tolerant Networks**”, International Journal of Research, ISSN NO:2236-6124, Volume 8, Issue 9, Page No : 51-56, September 2019, [DOI:16.10089.IJR.2019.V8I9.285311.236433](https://doi.org/10.10089.IJR.2019.V8I9.285311.236433).
10. R. Hepziba Gnanamalar, L.Sheeba ,” **6G through Artificial Intelligence: A Vision**”, Indian Journal of Natural Sciences, ISSN No.0976-0997 (Printed Version),Issue 82, February 2024 (**Web of Science**)
11. R. Hepziba Gnanamalar, L.Sheeba ,” **Airalert : An Air Compressor Failure Detection through Time Series Data using CNN In Deep Learning**”, Indian Journal of Natural Sciences, ISSN No.0976-0997 (Printed Version),Issue 82, February 2024 (**Web of Science**).
12. Dhanya G S, Hepziba Gnanamalar R, **A Real-Time Immersive Virtual Reality Framework for Zombie Shooting Games Using Unity and XR Interaction Toolkit**, International Journal of Scientific

Research in Computer Science and Engineering, Vol.13, Issue.4, pp.01-10, August 2025, E-ISSN: 2320-7639, DOI: <https://doi.org/10.26438/ijsrcse.v13i4.716>

13. Jayasree A, R. Hepziba Gnanamalar, **Development of a Logistic Regression-Based Framework for Early Diabetes Prediction Using Medical Features**, International Journal of Scientific Research in Computer Science and Engineering, Vol.13, Issue.5, pp.10-18, October 2025, E-ISSN: 2320-7639, DOI: <https://doi.org/10.26438/ijsrcse.v13i5.722>
14. Dhanya G S, Hepziba Gnanamalar R, **Eduvision AR: An Offline Multilingual Augmented Reality Learning Application**, 'International Journal of Emerging Science and Engineering (IJESE)', at Volume-13 Issue-12, November 2025, Page No 12-17, <https://doi.org/10.35940/ijese.L2629.13121125>
15. Dhanya G S, Hepziba Gnanamalar R, **A Real-Time Immersive Virtual Reality Framework for Zombie Shooting Games Using Unity and XR Interaction Toolkit**, International Journal of Scientific Research in Computer Science and Engineering, Vol.13, Issue.4, pp.01-10, August 2025, E-ISSN: 2320-7639
16. Preethi S , Dr. R. Hepziba Gnanamalar, **A Random Frame Based Approach For Secure Data Communication**, International Journal of Scientific Research in Computer Science and Engineering Vol.14, Issue.1, pp.01-05, February 2026, E-ISSN: 2320-7639
17. Vaishnavi L, Hepziba Gnanamalar R, **A User-Driven Hybrid Expense Management Framework Integrating Digital Payments and Cash Diary for Budget Monitoring**, International Journal of Scientific Research in Computer Science and Engineering, Vol.14, Issue.1, pp.01-05, February 2026, E-ISSN: 2320-7639

## Patent

S.No	Name of the Faculty	Title of the Invention	Application No.	Date of Filing	Publication Date
1.	Dr.R.Hepziba Gnanamalar	Hybrid Fuzzy Association Rule Algorithms to Detect the Anomalies in Health Care Data	The Patent Office Journal No. 19/2022	02/05/2022	13/05/2022

## Book Chapter Published

1. **"Eco friendly blockchain for smart cities"**, Green Blockchain Technology for Sustainable Smart Cities, ISBN: 9780323954075, 1st Edition - May 1, 2023, <https://doi.org/10.1016/B978-0-323-95407-5.00015-3> (Elsevier) (Scopus)
2. **"Human Digital Twin Processes and their Future"**, Transforming Industry using Digital Twin Technology, 187-217, ISBN978-3-031-58523-4, Springer Nature Switzerland, May 2024, [https://doi.org/10.1007/978-3-031-58523-4\\_10](https://doi.org/10.1007/978-3-031-58523-4_10) (Springer)
3. **"Digital twin technology in smart agriculture: Enhancing productivity and sustainability"**, Digital Twins for Smart Cities and Villages, 2025, Pages 327-352, ISBN - 978-0-443-28884-5, 2024, Elsevier Publisher, <https://doi.org/10.1016/B978-0-443-28884-5.00015-4> (Elsevier).
4. **"AI Powered Agricultural Robots for Smart Agriculture, Internet of Things and Analytics for Agriculture"**, Volume 4, Pages : XVI, 424, eBook ISBN: 978-981-96-7492-3, July 2025 <https://link.springer.com/book/9789819674916> (Springer) (Scopus)
5. **"Virtual reality and augmented reality in rehabilitation: bridging and transforming the gap to recovery "**, Robotics and Artificial Intelligence in Sports Medicine and Sports Services, Medical Robots and Devices: New Developments and Advances, 2025, Pages 123-145, ISBN: 978-0-443-21734-0, <https://doi.org/10.1016/B978-0-443-21734-0.00004-4> (Elsevier).

#### Acted as a Resource Person

S.No	Title	Organization	Date
1	Android Development Technologies	Bharathiar University Arts and Science College, Gudalur	31/07/2015
2	Aptitude – Mental Abilities	Bharathiar University Arts and Science College, Gudalur	01/08/2015
3	Internet of Things (IOT)	Bharathiar University Arts and Science College, Erode	08/09/2015
4	Soft Skills : Resume Preparation, Body Language, Group Discussion	Bharathiar University Arts and Science College, Erode	09/09/2015
5	Android Technology and Internet of Things (IOT)	Bharathidasan College of Arts and Science, Erode	07/01/2016
6	Career Preparation : Resume Preparation, Interview Preparation, Group Discussion	Bharathidasan College of Arts and Science, Erode	08/01/2016

7	E-Resume preparation and Group Discussion	Bharathiar University, Coimbatore	31/04/2017
8	Resume Preparation and Group Discussion	Bharathiar University, Coimbatore	14/07/2017
9	C++ Programming and Its Applications	KG College of Arts and Science	29/04/2023
10	Hands on training on Data Analytics and Visualization using Python Programming	Sardar Vallabhbhai Patel International School of Textiles & Management, Coimbatore	20/08/2025
11	Java Programming - Decision Making Statements in Java	Bharathiar University, Coimbatore	25.10.2025
12	Multi-Threaded Programming and Exception Handling in Java	Bharathiar University, Coimbatore	06.11.2025

### Reviewer in journal

- International Conference on Contemporary Research in Management and Technology, PSG Institute of Management, 27-28 February 2025.
- Advances in Science, Technology and Engineering Systems Journal, (ISSN: 2415-6698), Reviewer Code: AJR01550.
- International Journal of Engineering and Advanced Technology (IJEAT) — ISSN 2249 - 8958
- International Journal of Recent Technology and Engineering (IJRTE) — ISSN 2277 - 3878
- International Journal of Innovative Technology and Exploring Engineering (IJITEE) — ISSN 2278 - 3075
- International Journal of Soft Computing and Engineering (IJSCE) — ISSN 2231 - 2307
- International Journal of Innovative Science and Modern Engineering (IJISME) — ISSN 2319 - 6386
- International Journal of Inventive Engineering and Sciences (IJIES) — ISSN 2319 - 9598
- International Journal of Advanced Engineering and Nano Technology (IJAENT) — ISSN 2347 - 6389
- International Journal of Emerging Science and Engineering (IJESE) — ISSN 2319 - 6378
- Eastasouth Institute Journals. Reviewer Code: 02/EI/X/2024

### Editorial Board Member

- Member of 'Editorial Board' of 'Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP)' for the year 2023-24
- Member of 'Editorial Board' of 'Lattice Science Publication (LSP)' for the year 2023-24

- Computer Science and Engineering Research, Green Publishing Consortium Limited

### **Paper Presentations in Conference**

1. Penetration of Internet of Things in Healthcare A Review - International Conference on Advanced IT, Engineering and Management on 10th and 11th January 2024 at St.Aloysius College Institute of Management and IT, Mangaluru
2. Augmented Reality/Virtual Reality in Medical Field - International Conference on Advanced IT, Engineering and Management on 10th and 11th January 2024 at St.Aloysius College Institute of Management and IT, Mangaluru
3. Unveiling the Transformative Potential of Artificial Intelligence - International Conference on Advanced IT, Engineering and Management on 10th and 11th January 2024 at St.Aloysius College Institute of Management and IT, Mangaluru
4. Cybersecurity Essentials for a Safer Online Experience - International Conference on Advanced IT, Engineering and Management on 10th and 11th January 2024 at St.Aloysius College Institute of Management and IT, Mangaluru
5. Human Computer Interaction In Virtual Reality A Review - International Conference on Advanced IT, Engineering and Management on 10th and 11th January 2024 at St.Aloysius College Institute of Management and IT, Mangaluru
6. Image and Video Processing With AI Tools - Second International Conference on Recent Trends in Computer Science and Data Analytics - 2024 (ICRTCSDA '24) on 2nd February 2024 at KPR College of Arts Science and Research, Coimbatore
7. Communication and Networking Application in Food and Agriculture - Second International Conference on Recent Trends in Computer Science and Data Analytics - 2024 (ICRTCSDA '24) on 2nd February 2024 at KPR College of Arts Science and Research, Coimbatore
8. Innovations in Image and Video Processing Technologies - Second International Conference on Recent Trends in Computer Science and Data Analytics - 2024 (ICRTCSDA '24) on 2nd February 2024 at KPR College of Arts Science and Research, Coimbatore
9. Hepziba Gnanamalar. R, Vending Machine for Sanitary Napkin with SMS Alert, International Conference on Advances in Artificial Intelligence and Machine Learning, PSGR Krishnammal College for Women, 22nd & 23 rd February 2024, Pp. 345
10. Hepziba Gnanamalar. R, Symbiotic Dynamics of Communication and Networking in the Digital Age, International Conference on Advances in Artificial Intelligence and Machine Learning, PSGR Krishnammal College for Women, 22nd & 23 rd February 2024 Pp. 350
11. Artificial Intelligence and Predictive Analytics, pp. 498, International Conference on Advances in Artificial Intelligence and Machine Learning, PSGR Krishnammal College for Women, 22nd & 23 rd February 2024
12. Indian Sign Language Recognition using Convolutional Neural Network, pp 502, International Conference on Advances in Artificial Intelligence and Machine Learning, PSGR Krishnammal College for Women, 22nd & 23 rd February 2024

13. Fraud Detection in Digital Money Transaction , International Conference on Advances in Artificial Intelligence and Machine Learning, PSGR Krishnammal College for Women, 22nd & 23 rd February 2024
14. Cyber Security For Autonomous Vehicles - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
15. Biometric Authentication and Security: An Overview of Challenges And Advance - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
16. Strong Password and Multi factor Authentication - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
17. Human Factors in Cyber Security - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
18. Investigating the Security Implications of the Internet of Things - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
19. AI and The Future Of Cybersecurity - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
20. Importance Of Network Encryption in Securing Data - Second International Conference on Cyber and Information Security(ICCIS 2.0),Dwaraka Doss Goverdhan Doss Vaishnav College,15nd &16nd October 2024
21. Cybersecurity in IoT Devices: Securing Homes and Smart Cities - International Conference on Transformative and Inclusive Science For Sustainable Future, Vidhya Sagar Women's College,28th February 2025
22. Intelligent Transport Systems - International Conference on Transformative and Inclusive Science For Sustainable Future,Vidhya Sagar Women's College,28th February 2025
23. Smart Agriculture Using IoT for Sustainable Crop Production - International Conference on Transformative and Inclusive Science For Sustainable Future,Vidhya Sagar Women's College,28th February 2025.

## Grants

S.No	Title of the Project	Year	Fund	Agency
1	Development of a ChatBot by customizing ChatGPT for AI-based Admission Assistance System	2023	1,00,000	GRG Trust
2	WattWatchers: Enabling Sustainable Green Initiatives via Energy Tracking and Gamification in Hostel for Students	2025	1,50,000	GRG Trust

## Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
South Asia Institute of Science and Engineering (SAISE)	Active	Life Time

## Awards/Honors

Awards/Honors	Agency/Institute	Year of Award
Outstanding Contribution Award of the journal WSIST	WSIST: West Science Information System and Technology	2023
Top Performing Mentor Award	NPTEL Online Course "Enhancing Soft Skills and Personality	2023
Top Performing Mentor Award	NPTEL Online Course "Soft Skill Development"	2023
Best YRC Co-Ordinator	Indian Red Cross Society	2025
CIIED Think Tank Top Idea Award	WOSM – Work Smart Streamlined Task Management Tool	March 2024
CIIED Think Tank Top Idea Award	Smart Soil Monitoring for Farming – GroundEye	July 2024
CIIED Think Tank Top Idea Award	HydroHub	July – Oct 2025
CIIED Think Tank Top Idea Award	360 <sup>0</sup> Gamified Career Support - GUIDORA	July – Oct 2025

## Contribution

- YRC Coordinator from 2022 onwards
- NPTEL Mentor
- ELGI Mentor (2023-2025)
- Association Incharge (2022-2024)
- Robotics Process Automation Mentor
- Wadhvani – IgniteX Mentor

Databases	Links
Google Scholar ID	<a href="https://scholar.google.co.in/citations?user=Feb5GCEAAAAJ">https://scholar.google.co.in/citations?user=Feb5GCEAAAAJ</a>
Orcid ID	<a href="https://orcid.org/0000-0001-5985-4893">https://orcid.org/0000-0001-5985-4893</a>
Vidwan ID	<a href="https://vidwan.inflibnet.ac.in/profile/273132">https://vidwan.inflibnet.ac.in/profile/273132</a>
Inflibnet ID	<a href="https://sherni.inflibnet.ac.in/profile/273132">https://sherni.inflibnet.ac.in/profile/273132</a>
WOS ID	<a href="https://www.webofscience.com/wos/author/record/PLC-6394-2026">https://www.webofscience.com/wos/author/record/PLC-6394-2026</a>