

Faculty Profile

Name : Dr. Jayasri B.S

Designation : Professor

Department : Computer Science and Engineering

Contact Details:

E-mail : jayasribs@nie.ac.in

Phone : 9449524726



I Dr.Jayasri B.S am currently working as a professor in the department of Computer Science & Engineering at The National Institute of Engineering, Mysore, Karnataka. I have obtained my B.E degree in CS (1997) from Mysore University and M. Tech degree (2006) from Visveswaraya Technical University, Belgaum. I holds a Ph.D. in Computer Science and Engineering from NIE under VTU (July 2019). my research primarily focuses on wireless sensor network and have more than 28 years of teaching experience and have published more than 30 papers in reputed journal and conferences. Presently under me 6 research candidates are working for their P.hD Degree and 1 candidate has successfully completed his PhD under my able guidance. I have handled more than 30 different subjects till date including UG and PG subjects and worked across various departments of Computer allied branches from past 25 years. I have also served as **DEAN-EA&B** for a brief period of 9 months. I has also served as the **HOD of Department of CS&E at NIEIT**, which is a sister institute of N.I.E, Mysore. I have worked as **Teaching Assistant** for a couple of NPTEL/SWAYAM courses (Social Networks, Joy of Computing). My area of interest includes Wireless Sensor Networks, Wireless Communication, Machine Learning, AI,Operational Research and System Simulation Modelling. She was also been nominated as the session chair and worked as reviewer for several of the conferences. I have also served as a PG NBA coordinator and Assistant warden during my present tenure.

Qualification:

B. E. Computer Science and Engineering , N.I.E (Mysore Univ.), MTech Computer Networks, N.I.E (VTU), Ph.D.Wireless Sensor Networks, N.I.E (VTU, Belagavi)

Courses Taught: Some of the **UG courses** includes Cryptography and Network security, Operation Research, Cloud Computing, Storage Area Networks, Analysis and Design of Algorithms, Operating System, System Simulation and Modelling and Distributed Operating System

PG courses taught by me includes Wireless Communication, Advanced Digital Communication, Advanced Computer Networks, Advances in Operating System, Advanced Storage Area Networks

Publications:

Journal Publications

1. G. S. Cheluvvaraju and B. S. Jayasri, "Improving COVID-19 chest X-ray classification via attention-based learning and fuzzy-augmented data diversity," *Bulletin of Electrical Engineering and Informatics*, vol. 14, no. 5, Oct. 2025. doi: 10.11591/eei.v14i5.10861.
2. A. B. Rajendra, B. S. Jayasri, S. Ramya, and S. Jagadish, "An optimized Wasserstein deep convolutional generative adversarial network approach for the classification of COVID-19 and pneumonia," *Biomedical Signal Processing and Control*, Feb. 2025. doi: 10.1016/j.bspc.2024.107100.
3. G. S. Cheluvvaraju and B. S. Jayasri, "Insight of recent artificial intelligence-based strategy to effectively screen COVID-19," *IAES International Journal of Artificial Intelligence (IJ-AI)*, vol. 13, no. 3, pp. 2482–2489, Sep. 2024. doi: 10.11591/ijai.v13.i3.pp2482-2489.
4. M. Sindhuja, S. Vidhya, B. S. Jayasri, and F. H. Shajin, "Multi-objective cluster head using self-attention based progressive generative adversarial network for secured data aggregation," *Ad Hoc Networks*, Mar. 2023. doi: 10.1016/j.adhoc.2022.103037.
5. J. B. S. Jayasri, "Real time question paper generator using ML," *International Journal of Scientific Development and Research (IJS DR)*, Aug. 2023.
6. J. B. S. Jayasri, "StudyZen - An application for collaborative learning and resource sharing," *International Journal of Scientific Development and Research (IJS DR)*, Aug. 2023.
7. B. S. Jayasri and G. R. Raghavendra Rao, "A novel predictive optimization scheme for energy-efficient reliable operation of a sensor in dynamic scenarios," *International Journal of Electrical and Computer Engineering*, vol. 10, no. 1, pp. 323–332, 2020. doi: 10.11591/ijece.v10i1.pp323-332.
8. Y. Darshini and B. S. Jayasri, "Preserving security and integrity in a vehicular ad-hoc network using pseudo ID-based scheme," *International Research Journal of Engineering and Technology (IRJET)*, vol. 7, no. 5, pp. 7016–7020, May 2020.

9. S. B. Sivanvitha, K. V. Soujanya, and B. S. Jayasri, "MSD Apriori: Discovering Borderline Rare Items using Association Mining," *International Journal of Engineering Science and Computing (IJESC)*, vol. 10, no. 4, Apr. 2020, ISSN: 2321-3361.
10. R. G. Raghuvardhan, S. P. Sagar, M. Sahana, A. V. Raghav, and B. S. Jayasri, "Attendance Management System Using Real Time Face Recognition," *International Research Journal of Engineering and Technology (IRJET)*, vol. 6, no. 4, pp. 3854–3857, Apr. 2019.
11. G. B. N. Gangamma, H. R. Sindhura, K. S. Shubha, B. R. Kusuma, and B. S. Jayasri, "Protection of personal data on distributed cloud using biometrics," *International Research Journal of Engineering and Technology (IRJET)*, vol. 6, no. 4, pp. 1–5, Apr. 2019.
12. B. S. Jayasri and G. R. Raghavendra Rao, "Analytical modelling of power efficient reliable operation of data fusion in wireless sensor network," *International Journal of Electrical and Computer Engineering*, vol. 8, no. 6, pp. 4637–4645, 2018. doi: 10.11591/ijece.v8i6.pp.4637-4645.
13. A. C. Raj, A. Hemanth, A. Sinha, A. K. Singh, and B. S. Jayashree, "Sign language interpreter," *International Research Journal of Engineering and Technology (IRJET)*, vol. 5, no. 4, pp. 4968–4971, Apr. 2018.
14. K. P. Kavya, K. N. Pallavi, M. N. Shwetha, K. Swetha, and B. S. Jayasri, "Use of smart sensor and IoT to monitor the preservation of food grains at warehouse," *International Journal for Research Trends and Innovation (IJRTI)*, vol. 2, no. 6, pp. 449–452, 2017.
15. V. H. Vinay and B. S. Jayashree, "A survey on implementation and design of cloud based NMS," *IRACST International Journal of Computer Networks and Wireless Communications (IJCNWC)*, vol. 5, no. 2, pp. 461–465, Apr. 2015.
16. B. S. Jayasri and G. Raghavendra Rao, "EEDF: Energy efficient data fusion supportive of virtual multipath propagation in WSN," *International Journal of Applied Engineering Research*, vol. 10, no. 86, pp. 54–59, 2015.
17. S. S. Archana and J. B. S. Jayashree, "Energy efficient clustering techniques for wireless sensor networks – A review," *International Journal of Innovative Science, Engineering & Technology (IJISSET)*, vol. 2, no. 3, pp. 205-210, Mar. 2015.
18. S. Shashikantha and J. B. S. Jayashree, "Interactive educational applications for children using Microsoft Kinect sensor," *International Journal for Scientific Research & Development (IJSRD)*, vol. 3, no. 2, pp. 692–695, 2015.

19. Jayasri B. S. and G. Raghavendra Rao, "Need for Energy Efficient Data Fusion in Wireless Sensor Networks," *International Journal of Engineering Research & Technology (IJERT)*, vol. 3, issue 1, pp. 1663–1668, Jan. 2014.

Conference Proceedings:

1. B. S. Jayasri, S. Devadiga, G. R. Prajwal, and N. P. Prajwal, "Early detection of paddy disease and severity based classification using variants of CNN – A step towards smart agriculture," in *Proc. 9th Int. Conf. Computational System and Information Technology for Sustainable Solutions (CSITSS)*, 2025. doi: 10.1109/CSITSS67709.2025.11295786.
2. B. S. Jayasri, C. Prathik, S. Batni, S. Srivatsa, and S. K., "Emotion-driven music curation using CNN and dynamic data source integration," in *Proc. 2025 Annual Int. Conf. Data Science, Machine Learning and Blockchain Technology (AICDMB)*, 2025. doi: 10.1109/AICDMB64359.2025.11277536.
3. S. Ramya and B. S. Jayasri, "A review on the analysis of behavioral pattern of students during pandemic COVID-19," in *Proc. Int. Conf. on Recent Trends in Engineering and Computing (ICRTEC)*, 2023. doi: 10.1109/ICRTEC56977.2023.10111912.
4. K. B. Kavya and B. S. Jayasri, "Analysis on feature selection and classification of cardiovascular disease using machine learning," in *Proceedings of the International Conference on Mobile Networks and Wireless Communications (ICMNWC)*, 2023, doi: 10.1109/ICMNWC60182.2023.10435713.
5. T. Prakash, B. S. Jayasri, and K. R. Prakash, "Smart health monitoring system using robotics," in *Proc. Int. Conf. on Recent Engineering and Computing Technologies (ICERECT)*, 2022. doi: 10.1109/ICERECT56837.2022.10060736.
6. K. S. Vrunda and B. S. Jayasri, "Sentimental analysis of Twitter data and comparison of COVID-19 cases trend using machine learning algorithms," in *Proc. Global Conf. on Artificial Intelligence and Technology (GCAT)*, 2022. doi: 10.1109/GCAT55367.2022.9971980.
7. M. N. Acharya, M. V. Reddy, B. S. Jayasri, K. P. Rahul, N. Kumar, and S. Lokesh, "Covid-19 safety protocol monitoring system using AI," in *Proc. 2021 Asian Conf. on Innovation in Technology (ASIANCON)*, 2021. doi: 10.1109/ASIANCON51346.2021.9544683.

8. [7] H. S. Govinda, Y. Chandrakant, D. S. Girish, S. Lokesh, R. Ravikiran, and B. S. Jayasri, "Implementation of election system using blockchain technology," in *Proc. Int. Conf. on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES)*, 2021. doi: 10.1109/ICSES52305.2021.9633828.
9. [8] P. Prajwal, D. Prajwal, D. H. Harish, R. Gajanana, B. S. Jayasri, and S. Lokesh, "Object detection in self driving cars using deep learning," in *Proc. Int. Conf. on Innovative Computing, Intelligent Communication and Smart Electrical Systems (ICSES)*, 2021. doi: 10.1109/ICSES52305.2021.9633965.
10. A. Aralikatti, J. Appalla, K. S, N. G. S, S. Lokesh, and B. S. Jayasri, "Real-time object detection and face recognition system to assist the visually impaired," *Journal of Physics: Conference Series*, vol. 1706, no. 1, p. 012149, 2020, doi: 10.1088/1742-6596/1706/1/012149.
11. J. J. Deshpande, M. Gowda, M. Dixit, M. S. Khubbar, B. S. Jayasri, and S. Lokesh, "Permissioned blockchain based public procurement system," *Journal of Physics: Conference Series*, vol. 1706, no. 1, p. 012157, 2020, doi: 10.1088/1742-6596/1706/1/012157.
12. [9] B. S. Jayashri and G. R. Raghavendra Rao, "Reviewing the research paradigm of techniques used in data fusion in WSN," in *Proc. Int. Conf. on Computing and Communications Technologies (ICCCT)*, 2015.

Book Chapters

1. B. S. Jayasri, V. Balaji, P. N. Bhat, R. D. Pai, S. Ananthu, and H. P. S. Hari, "NFT marketplace for exchange of digital artifacts using smart contract," in *Advances in Data Science and Artificial Intelligence: Proceedings of ERCICA*, Lecture Notes in Electrical Engineering, vol. 1399, Singapore: Springer, 2025, ch. 9. doi: 10.1007/978-981-96-4430-8_9.
2. Jayasri. B. S., A. Harshit Joshi, P. K. Choubey, R. Bagati, and S. K. Singh, "Multi-facial recognition using multi-task cascaded convolutional neural networks," in *Advances in Data Science and Artificial Intelligence: Proceedings of ERCICA*, Lecture Notes in Electrical Engineering, vol. 1399, Singapore: Springer, 2025, ch. 10. doi: 10.1007/978-981-96-4430-8_10.

3. S. Srivastava, S. M. Edappanavar, S. Shukla, Y. S. K. Amarthya, S. Jayasri, and S. Lokesh, "Citizen feedback management using sentimental analysis," in *Advances in Intelligent Systems and Computing*, Springer, 2022, ch. 50. doi: 10.1007/978-981-16-7330-6_50.
4. B. S. Jayasri and G. R. Raghavendra Rao, "FRDF: Framework for reliable data fusion to leverage communication performance in sensor network," in *Advances in Intelligent Systems and Computing*, Springer, 2017, ch. 2. doi: 10.1007/978-3-319-57141-6_2.
5. S. Jayasri and G. R. Raghavendra Rao, "RaESS: Reliable-and-efficient statistical spreading data fusion mechanism in wireless sensor network," in *Advances in Intelligent Systems and Computing*, Springer, 2017, ch. 33. doi: 10.1007/978-3-319-57141-6_33.

Patents

1. S. K. Yadav, N. Kumar, **B. S. Jayasri**, P. Vasanthan, H. Ali, N. Arunachalam, S. Balasubramanian, G. Muthumari, M. Monika, and P. Latha, "*Artificial Intelligence and IoT Based Automatic Smart Health Care System to Monitor and Predict Breast Cancer to Early Stages for Healthy Life for All Ages of Women Using WSN, Image Processing and Deep Learning Algorithms*," Indian Patent Application No. **202211062682**, Publication No. **45/2022**, published **Nov. 11, 2022**, Intellectual Property India.
2. S. C. Santhosh, K. K. Umesh, S. Siddesha, and **B. S. Jayasri**, "A compendium machine learning probabilistic prospective for predicting coffee crop yield based on agronomical factors," Indian Patent Application **202341063599**, Publication No. 40/2023, The Patent Office Journal, India, Oct. 06, 2023.
3. S.C Girish, **B. S. Jayasri**, S. Ramya, C. S. Santhosh, H. S. Sushma, and B. Kavya, "AI based device for COVID detection," Indian Design Application 43408-001, filed 13-Sep-2024, published 13-Sep-2024, Design **No. 430408_001**.
4. V. R. C. Vidya Raj, **B. S. Jayasri**, H. D. Haripriya, M. Sharma, and N. Bobby, "Sustainable Innovative AI Powered Design Solution for Alzheimer Patients' Better Well-Being," Indian Patent Application **202541055259 A**, filed Jun. 8, 2025, published Jun. 13, 2025, Patent Office Journal No. 24/2025.
5. **B. S. Jayasri**, S. Lokesh, C. Vidya Raj, S. Bhuvana, S. Devadiga, G. R. Prajwal, and N. P. Prajwal, "Early detection of paddy disease and severity based classification using variants of CNN – A step towards smart agriculture," **India Patent Application No.**

202641008121, filed Jan. 28, 2026, published in *Patent Office Journal*, Issue 07/2026, Feb. 13, 2026.

Other achievements:

HONORS, AWARDS, AND DISTINCTIONS

- **Expert**, SMART INDIA HACKATHON, Ministry of Education, 2022.
- **Jury Member**, Mysore Open Hack 2.0 and 3.0, LTTS, Mysore, 2024 and 2025.
- **Judge**, Science Expo SRUJANA, School of Lifescience, JSS Academy, 2023.
- **Teaching Assistant**, NPTEL courses on Social Networks and Deep Learning (2021).
- **LIC Committee Member**, Visvesvaraya Technological University (2022-2023).
- **BOS, BOE, DAB Member**, for several VTU-affiliated colleges and universities.
- **Keynote Speaker, Session Chair** for several conferences

Google Scholar profile: <https://scholar.google.co.in/citations?user=rS4E99wAAAAJ&hl=en>

● **ORCID profile:** <https://orcid.org/0000-0003-3766-5930>

● **Scopus ID:** <https://www.scopus.com/authid/detail.uri?authorId=57194091014>