



FACULTY PROFILE ON WEBSITE

Faculty Name	Dr DASARI BHULAKSHMI	
Academic Designation	Assistant Professor	
Educational Qualification	Ph.D	
Experience in Teaching & Industry	14 & 10	
Date of Joining	01/09/2025	
Official Email ID	Bhulakshmi-cse@dsatm.edu.in	
Employee ID	180879	

Educational Details

- PhD: Specialization in Artificial Intelligence, Deep Learning, Federated Learning, and Medical Image Analysis for Ophthalmic Disease Diagnosis. Thesis on “Federated Deep Learning for Diabetic Retinopathy Detection and Classification: A Privacy-Preserving Diagnostic Approach”. VIT, 2026.
- M.Tech: Computer Science and Engineering, JNT University, 2008.
- B.Tech: Computer Science and Engineering, JNT University, 2004.
- Diploma; Computer Science and Engineering, GMR Polytechnic, STBTE&T, 1999.

Professional Experience

- Currently working as Assistant Professor at Dayananda Sagar Academy of Technology and Management from Sep to till date.
- Worked as an Assistant Professor in REVA UNIVERSITY in Computer Science & Engineering from 2019 to 2022 in Bangalore, Karnataka.
- Worked as an Assistant professor in CMR UNIVERSITY in Computer Science & Engineering from 2018 to 2019 in Bangalore, Karnataka
- Worked as an Assistant Professor in KNS Institute of Technology in Information Science & Engineering from 2008 to 2016 in Bangalore, Karnataka.
- Worked as a Lecturer in the GATES Institute of Technology in Computer Science & Engineering from 2004 to 2006 in AP, Anantapur.

Publications

- Mehra, P., Kaur, D. P., Rathi, V., Bhulakshmi, D., & Lakhanpal, S. (2026, February). **Blockchain-Enabled Cyber-Physical Systems for Secure and Transparent Data Exchange Across Distributed Networks**. In *2026 2nd International Conference on Big Data & Machine Learning (ICBDML)* (pp. 1-6). IEEE.
- Bhulakshmi D., & Rajput, D. S. **Leveraging Ensembles of Pre-trained CNNs for Improved Lung Cancer Detection and Classification**. *Procedia Computer Science*. 2025 Jan 1;260:151-9.
- Manasa, M. A., Shree, M., Vijay, M., Reddy, K. M., & Bhulakshmi, D. (2024, February). **An innovative concept for a computerised e-mail system based on voice to text for visually impaired**. In *AIP Conference Proceedings* (Vol. 2742, No. 1, p. 020106). AIP Publishing LLC.
- **Bhulakshmi, D., & Rajput, D. S. (2024). A systematic review on diabetic retinopathy detection and classification based on deep learning techniques using fundus images**. *PeerJ Computer Science*, 10, e1947. <https://doi.org/10.7717/peerj-cs.1947> (Journal: PeerJ Computer Science,, Publisher: PeerJ, Impact Factor:3.8, Quartile: Q1)
- Bhulakshmi, D., & Rajput, D. S. (2024). **FedDL: Personalized federated deep learning for enhanced detection and classification of diabetic retinopathy**. *PeerJ Computer Science*, 10, e2508. <https://doi.org/10.7717/peerj-cs.2508> (Journal: PeerJ Computer Science,, Publisher: PeerJ, Impact Factor:3.8, Quartile: Q1)
- **Bhulakshmi, D., & Rajput, D. S. (2024). Privacy-preserving detection and classification of diabetic retinopathy using federated learning with FedDEO optimization**. *Systems Science & Control Engineering: An Open Access Journal*, 12(1), 2436664. <https://doi.org/10.1080/21642583.2024.2436664> (Journal: Systems Science & Control Engineering, Publisher: Taylor & Francis, Impact Factor: 3.2, Quartile: Q1)
- **Bhulakshmi, D., & Rajput, D. S. (2025). Leveraging Ensembles of Pre-trained CNNs for Improved Lung Cancer Detection and Classification**. *Procedia Computer Science*, 260, 151-159. Publisher:(Elsevier, Scopus)
- **Bhulakshmi, D., & Rajput, D. S. (2026). “Federated Swin Transformer for Privacy-Preserving Detection and Classification of Diabetic Retinopathy with SHAP-Enhanced Explainability”**. *IEE Explore: An Open Access Journal*, (Journal: Frontiers in AI, Publisher: Frontiers, Impact Factor: 6.7, Quartile: Q1)(Communication)
- Bhulakshmi, D., Vyas, P., et al. (2024). **“Industry 5.0 in smart education: Concepts, applications, challenges, opportunities, and future directions”**. *IEEE Access*, 12, 3401473. DOI: 10.1109/ACCESS.2024.3401473. (Journal: IEEE Access, Publisher: IEEE, Impact Factor: 3.4, Quartile: Q1)
- Bhattacharya, S., Vyas, P., Yarradoddi, S., Dasari, B., et al. (2023). **Towards smart education in the Industry 5.0 era: A review on federated learning applications**. *Proceedings of IEEE DASC/PiCom/CBDCCom/CyberSciTech2023*,602-608. <https://doi.org/10.1109/DASC/PiCom/CBDCCom/Cy59711.2023.10361510>. (Journal: IEEE international symposium on dependable autonomic and secure computing dasc, Publisher: IEEE).
- Vyas, P., Bhattacharya, S., Supriya, Y., Bhulakshmi, D., Gadekallu, T. R., Kaluri, R., ... & Koppu, S. (2023, November). **Impact of Value-Added Courses and Personalized Method of Delivery in Achieving Industry Readiness: An Industry 4.0 Perspective**. In *International Conference on Computing and Communication Networks* (pp. 633-648). Singapore: Springer Nature Singapore.
- Govardanan, C. S., Murugan, R., Yenduri, G., Gurrammagari, D. R., Bhulakshmi, D., Kandati, D. R., Supriya, Y., Gadekallu, T. R., Rathore, R. S., & Jhaveri, R. H. (2023). **The amalgamation of federated learning and explainable artificial intelligence for the Internet of Medical Things: A review**. *Recent Advances in Computer Science and Communications*, 17(4), Article e121223224367. <https://doi.org/10.2174/0126662558266152231128060222>. (Journal: Recent Advances in Computer Science and Communications, Publisher: Bentham Science)
- Nagashree, N., & Bhulakshmi, D. (2022). **“A Novel NLP-based UNet classifier for detection of spam email”**, *International Journal of Computational Learning & Intelligence*, 1(2), 15-18.
- Bhulakshmi, D., Naveen, U., Suresh, V., Atmakuri, L., & Reddy, T. R. (2024). **“Web application of college event management”**. *AIP Conference Proceedings*, 2742(1), 020056.

<https://doi.org/10.1063/5.0200491>.

- Dasari Bhulakshmi, S. Arundathi “A prediction for students' performance using data mining id3 algorithm”, IJSER, Vol. 5, Issues.7, 2014.
- Dasari Bhulakshmi, S. Arundathi “Providing privacy and security for cloud data using data mining” IJISR in ISSN 2351-8014, Vol. 11 No. 2 Nov, 2014.
- N B Kalashree, D Bhulakshmi. “Student Grading System using Machine Learning ”, Journal of Test Engineering and Management, Vol. 83, Page Number: 4341-4346, May -June 2020, ISSN: 0193-4120.<http://www.testmagzine.biz/index.php/testmagzine/article/view/8080/6106>
- "Smart Waste Management Using IoT." *Journal of Test Engineering and Management*, Volume 83, PageNumber:4437-4440,ISSN:0193-4120. <http://www.testmagzine.biz/index.php/testmagzine/article/view/8103/6125>
- U Naveen, Dasari Bhulakshmi “Web Application of Event Management” IJSART, ISSN- 2395-1052 , in volume 6, issue 5, May 2020.
- The paper was published in the International Journal of Advanced Research in Computer Science on “voice-controlled smart switch board” in Volume 11, Special Issue I, May 2020. <http://www.ijarcs.info/index.php/Ijarcs/article/view/6542>
- The paper was published in IJSART on “Web Application of Event Management” in volume 6, issue 5, May 2020. <http://ijsart.com/Content/PDFDocuments/IJSARTV6I536572.pdf>
- “A Survey Paper on Smart Health Monitoring of Quarantined People” Issue Vol. 29 No. 3 (2020) <http://serisc.org/journals/index.php/IJAST/article/view/30394>

International Conferences:

- “Federated Learning for Advanced Detection and Classification of Diabetic Retinopathy with Enhanced Privacy Protection” has been presented by Dasari Bhulakshmi, a Research Scholar at VIT Vellore, in the two-day National Seminars on Cyber Security in the Age of AI and ML held on 27, 28 February 2025.
- Presented the paper titled “Transforming Education in The Digital Age: Challenges and Opportunities” in the National Conference “Digi Edu 2024: Transforming Education and Learning Systems” held from March 7th to March 9th, 2024, organized by the Central University of Himachal Pradesh in collaboration with Consortium for Educational Communication, New Delhi.
- Presented the paper titled “The Future of Healthcare: Navigating Patient Care with the Metaverse and XAI” at the International Conference on Recent Advances in Mathematics and Data Science, organized by the Department of Mathematics, Bioinformatics, and Computer Applications, Maulana Azad National Institute of Technology, Bhopal, from June 27 to June 28, 2024.
- Presented the paper titled “Impact of Value-Added Courses and Personalized Delivery in Achieving Industry Readiness: An Industry 4.0 Perspective” at the International Conference on Computing and Communication Networks (ICCNet-2023) on November 18, 2023.
- Presented the research paper entitled Challenges in Software SMES in Bengaluru in the International E-Conference On “Impact of Covid-19 On Society, Economy & Environment: Challenges, Solution & Possibilities” Organized by MJD Govt. College Taranagar, Churu (Rajasthan) On 13-14 June,2020
- The paper presented in the international conference titled “Study of Checksum for data Integrity Verification in a Network”, Held at Sapthagiri College of Engg, July 2021, Bangalore.

Awards

- **Dr. APJ ABDUL KALAM AWARD** for the Review Article entitled “**A systematic review on diabetic retinopathy detection and classification based on deep learning techniques using fundus images**” by Dasari Bhulakshmi., Rajput D.S., for their Publication in Scopus Indexed Journal in the month of June 2023. **(Prize money15k)**
- **RAMAN RESEARCH AWARD** for the Research Publication entitled “**FedDL: personalized federated deep learning for enhanced detection and classification of diabetic retinopathy**” by Dasari Bhulakshmi. Rajput D.S., for their Publication in Scopus Indexed Journal in the month of December 2024. **(Prize money10k)**
- **RAMAN RESEARCH AWARD** for the Research Publication entitled “**Privacy-preserving detection and classification of diabetic retinopathy using federated learning with Fed DEO optimization**” by Dasari Bhulakshmi. Rajput D.S., for their Publication in Scopus Indexed Journal in the month of December 2024. **(Prize money10k)**

Academic Activity

- National Training program on “**Development of Soft Skills**” at SVU UNIVERSITY Tirupati on 22nd Feb 2021.
- Resource person for Technical Talk on “**Linux Recent Updates**” at Nagarjuna College of Engineering & Technology, Bangalore on 7th March 2022.
- Resource person for technical seminar on “Research paper writing”, 27th October 2026, DSATM.

Faculty Development Activity/Workshops

- Successfully participated in and completed the 'Data Analysis Using STATCRAFT' workshop on March 16, 2023.
- Participated in Five Days FDP on **Deep Spectacle of Deep learning architecture concepts and GAN with Deep fake techniques** organized by Academic Staff College in association with School of Computing Sciences and Engineering of VIT Vellore from 05-Sep-2022 to 09-Sep-2022.
- Participated in a half-day FDP on '**Prevent and Reverse Lifestyle Disorders—BP, Diabetes, Obesity, and Cholesterol Issues,**' organized by the Academic Staff College in association with the School of Information Technology and Engineering at VIT Vellore on October 3, 2022.
- Participated in the Three Days FDP on **Emerging Trends in Data Science, Artificial Intelligence, and Machine Learning** organized by the Academic Staff College in association with the School of Information Technology and Engineering of VIT Vellore from 19-Dec-2022 to 21-Dec-2022.
- Participated in the One-Day Project Awareness Program on “**Smart methods for monitoring and mitigating effluents in water bodies using IoT and AI**”, organized by the School of Computer Science, Engineering & Information Systems, Vellore Institute of Technology, Vellore, India on 24.03.2025.
- Participated & completed successfully **AICTE Training and Learning (ATAL) Academy Online Elementary FDP on "Animation film design"** from 2021-07-27 to 2021-07-31 at JAIN (Deemed to be University).
- Organized Work shop on “**IoT**” conducted by REVA UNIVERSITY in November 2019.
- Organized Webinar on “**DevOps**” conducted by REVA UNIVERSITY in 19th to 22nd June 2020.
- Organized “**Skill Development Program on Android Application Development**” (27th July 2020 and 1st Aug2020). Reva University.
- Organized Faculty Development Program on “**Data Mining and Analytics**” held between 17th to 23rd Feb 2021 at Reva University.
- Organized Webinar on **Functional Programming Applications in Industry** 19th June 2021 at Reva University.
- Organized Work shop hands on” **INTERNET OF THINGS**” conducted by **School of C&IT, REVA**

UNIVERSITY in Dec 2019.

- Webinar series on “DevOp Tools” Organized by **School of Computing and IT in Association with AST Learning Solutions. (19th june 2020 to 22nd june 2020).**
- Attended the international webinar on “**artificial intelligence: science of present and future**” 19th june 2020. Chandil polytechnic college, jharkhand – 832401.
- Webinar on “**EMERGING TRENDS IN DATA ANALYTICS**” on 9th June 2020 organised by the Department of Computer Science & Engineering, Proudhavevaraya Institute of Technology, Hosapete.
- Participated in webinar on “**ENTREPRENEURSHIP - Possible path to career fulfillment**” hosted by Department of Computer Science & Engineering in collaboration with IFORTIS Corporate on June 14, 2020. JAIN UNIVERSITY, Bangalore.
- Participated in the Online Webinar on “**Intellectual Property Rights Patent Filing Procedure**” organized by the Department of Computer Science and Engineering on 9th June, 2020. K.L.E Institute of Technology, Hubballi.
- Attended the Webinar on “**Forensic Crime Detection-Signature Verification Process**” organised by Dept. of Electronics and Communication Engg, Vivekananda Institute of Technology, Bengaluru held on 12th JUNE 2020.
- Participation in Webinar on “Making an effective research proposal- The winning way” Organized by **Vivekananda Institute of Technology, Bengaluru 560074** in collaboration with Institution Innovation Council (MHRD Initiative) on **28th May 2020.**
- Attended webinar on **Star IoT Security specialist** organized by Star Certification on May 29th, 2020.
- Attended webinar on **Star Digital marketing** organized by Star Certification on May 30th, 2020.
- Attended Panel Discussion on 23rd May, 2020 titled “**Amidst Pandemic Outbreak, can we claim to be living in Technology Era?**” organized by **CENTER FOR PRESENCING AND DESIGN THINKING** Team of **VNRVJIET, HYDERABAD.**
- Participating in the webinar on **cyber security and MongoDB** held from the 8th to the 9th of june, 2020. School of C&IT, REVA UNIVERSITY.
- Participating in the virtual faculty development program on **OUTCOME BASED LEARNING, RESEARCH AND PROJECT BASED EDUCATION** held on the 12th and 13th june, 2020. REVA UNIVERSITY.
- Participated in the Webinar on “**Wellness Program**”- **The Science of Well Being**, organized by Department of Information Science and Engineering, Vivekananda Institute of Technology, Bangalore on **17th June 2020.**
- Participating in the virtual faculty development program on 5-day **AWS Cloud webinar series** held on the 11th and 15th june, 2020. REVA UNIVERSITY.
- Participating in the 5 days FDP on **Block chain technologies** held between the 25th and 29th june, 2020. REVA UNIVERSITY.
- Attended webinar on “**cloud virtual education system become new normal**” organized by IEEE young professionals Bangalore section on Sunday, 24th May 2020.
- Attended a “**Future of Online Education: Challenges and Opportunities**” webinar organized on 8th June 2020 by the Association of Indian Management Schools (AIMS).
- Participating in the virtual faculty development program on **ANDROID APPLICATION DEVELOPMENT** held on the 6th and 7th June, 2020. REVA UNIVERSITY.
- For active and valuable participation in the five-day Faculty Development Program on ‘**Machine Learning Using Python**’ organized from 25th - 29th May 2020. REVA UNIVERSITY.
- Participated in a “**2-Day Web Seminar on Innovation and Intellectual Property Strategy**” on **2nd and 3rd June 2020. Karnataka State Council for Science and Technology, Indian Institute of Science Campus, Bangalore.**

- Participated in a Webinar on **OOPS in PHP** held on **22 May 2020**. Organized by the Department of Computer Science and Engineering, SJB Institute of Technology, Bangalore.
- Attended webinar on Star **Robotics X-Pert** organized by Star Certification on June 1, 2020.
- Attended webinar on Star **AI X-Pert** organized by Star Certification on May 28th, 2020.
- Participated in FDP Organized by VTU, BELGUM in DON BOSCO Institute of Technology on **Research and Methodology using “LaTex”**, July 2019.
- Participated in the workshop on **“Data warehousing and business intelligence through industrial orientation”** conducted by Tata Consultancy Services in January 2008, JNTU College of Engineering, Kakinada.
- Attended the workshop on **“Qualnet simulation tool for Networks”** conducted by JNTU College of Engineering, Kakinada.

Contact Details

Assistant Professor
 Department of Computer Science & Engineering
 Dayananda Sagar Academy of Technology & Management. Bangalore-560082