



FACULTY PROFILE ON WEBSITE

Faculty Name	Mrs Dasari Bhulakshmi	
Academic Designation	Assistant Professor	
Educational Qualification	B.Tech , M.tech & (Ph.D)	
Experience in Teaching & Industry	17 & 00	
Date of Joining	01/09/25	
Official Email ID	Bhulakshmi-cse@dsatm.edu.in	
Employee ID	180879	

Educational Details

B.Tech in Computer Science and Engineering, M.Tech in Computer Science and Engineering and CSE(Ph.D)

Professional Experience

- Worked as a Lecturer in the GATES Institute of Technology in Computer Science & Engineering from 2004 to 2006 in AP, Anantapur.
- Worked as an Assistant Professor in KNS Institute of Technology in Information Science & Engineering from 2008 to 2016 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 REVA UNIVERSITY in Computer Science & Engineering from 2019 to 2022 in Bangalore, Karnataka.
- Vellore Institute of Technology, Vellore from 28-Oct-2024 to till now.

Publications

- 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. (2025). “Federated Swin Transformer for Privacy-Preserving Detection and Classification of Diabetic Retinopathy with SHAP-Enhanced Explainability”. IEE Explore: An Open Access Journal, (Journal: IEEE Access, Publisher: IEEE, Impact Factor: 3.4, 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/CBDCoM/CyberSciTech2023,602-608. <https://doi.org/10.1109/DASC/PiCom/CBDCoM/Cy59711.2023.10361510>.

(Journal: IEEE international symposium on dependable autonomic and secure computing dasc, Publisher: IEEE) • 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:01934120. <http://www.testmagzine.biz/index.php/testmagzine/article/view/8080/6106>
- "Smart Waste Management Using IoT." Journal of Test Engineering and Management, Volume 83, Page Number: 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>

Copyrights & Patent filed:

- The paper titled "Predicting Efficient Natural Disaster Preparedness Through Smart Systems" was registered for copyright in March 2020.
- The patent "Novel System for Mental Health State Analysis Using Machine Learning and Methods Thereof" was published in 2020. It was filed under Patent Number: 202041044754 and is associated with Christ (Deemed to Be University)
- The paper titled "Smart Sensor Technology for Monitoring Trees" was registered for copyright on May 3, 2021.
- Patent Filled "A System and Method for Real Time Sign Language to Speech Converter" 29/05/2021.
- Patent Filled "A System and Method for Anti-Virus Software Based on IP Address" 07/11/2021.
- Patent Filled "A System to Facilitate Farmers' Crop Productions Using Web-based Application" 07/07/2022.
- Patent Filled "An assistive system to detect autism in children using bio-inspired technique" 07/2022.

Book Chapters:

- "Impact of Value-Added Courses and Personalized Method of Delivery in Achieving Industry Readiness: An Industry 4.0 Perspective" was published in the

Proceedings of the Third International Conference on Computing and Communication Networks (ICCCN 2023) and is part of the Lecture Notes in Networks and Systems (LNNS) book series. (Publisher: Springer).

➤ Bhulakshmi, D., Yenduri, G., Maddikunta, P. K. R., Iwendi, C., & Gadekallu, T. R. (2024). “Federated learning for optimized communication in Industry 5.0”, Federated learning for multimedia data processing and security in industry 5.0, Page Numbers. [17-37] https://digitallibrary.theiet.org/doi/10.1049/PBPC066E_ch2. (Publisher: Institute of Engineering and Technology (IET)).

➤ Supriya, Y., Bhulakshmi, D., Bhattacharya, S., Gadekallu, T. R., Kaluri, R., Sumathy, S., Koppu, S., Vyas, P., Brown, D. J., & Mahmud, M. (2024). “Federated learning in medical education in Industry 5.0”, In Federated Learning for Multimedia Data Processing and Security in Industry 5.0 (pp. 225-247). https://doi.org/10.1049/PBPC066E_ch11. (Publisher: Institute of Engineering and Technology (IET)).

Resource Person:

- 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.

Papers Presented:

- “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 (ICCN-2023) on November 18, 2023.
- Presented the research paper entitled Challenges in Software SMES in Bengaluru in the International EConference 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.

Workshops, Webinars & FDPs Attended, Participated in, or Organized:

- 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.

Achievement:

- Secured 80.34 Percentile in GATE-2006(CSE).
- Served as a Research Associate for the British Council Project titled “Co-designing a Smart Curriculum and a Method of Personalized Delivery for Inclusive Value-Added Courses on Industry 4.0 Technologies” at the School of Information Technology and Engineering (SITE), Vellore Institute of Technology (VIT), Vellore, from May 29, 2023, to March 20, 2024.
- 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 money 15k)
- 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 money 10k)
- 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 money 10k)
- Served as a reviewer for BSPC and ICONIP conferences.

List of online certifications:

- Certification in "Machine Learning: Concepts and Applications," Date: 22-04-2023, Conducted by: University of Chicago (via Coursera), Instructor: Professor Nick Feamster.

• Certification in "Object Oriented Programming in JAVA," Date: 17-06-2020, Conducted by: University of California, San Diego (via Coursera), Instructor: Professor Christine Alvarado.

Skills:

- Works hard and efficiently with a smart approach.
- Handles complex situations with patience and calmness.
- Dedicated and committed to completing tasks responsibly.

Contact Details

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