



Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to **VTU**
Approved by **AICTE**
Accredited by **NAAC** with **A+** Grade
6 Programs Accredited by **NBA**
(CSE, ISE, ECE, EEE, MECH, CV)

Faculty Name	Ayain John	
Academic Designation	Assistant Professor	
Educational Qualification	M.E (PhD)	
Experience in Teaching & Industry	20 & 1	
Date of Joining	02/09/2024	
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Educational Details

- B.Tech. in Information Technology, Anna University, Chennai.
- M.E. in Computer Science and Engineering, Anna University, Coimbatore,
- Pursuing a part-time Ph.D. in Computer Science and Engineering at Amrita Vishwa Vidyapeetham, Bengaluru.

Professional Experience

- Assistant Professor, Department of Artificial Intelligence and Machine Learning in Dayananda Sagar Academy of Technology and Management, Bangalore, India, September 2024–Till date.
- Assistant Professor, Department of Artificial Intelligence and Machine Learning in Dayananda Sagar University, Bangalore, India, April 2023–August 2024.
- Assistant Professor, Department of Information Science and Engineering in AMC Engineering College, Bangalore, India, Aug 2019 – April 2023.
- Assistant Professor, Department of Computer Science and Engineering in T. John Institute of Technology, Bangalore, India, July 2016– June 2019.
- Assistant Professor, Department of Computer Science and Engineering in The Oxford Engineering College, Bangalore, India, July 2010– May 2014.
- Senior lecturer, Department of Computer Science and Engineering, METS School of Engineering, Mala, Kerala, India, December 2009 – June 2010, July 2014 to June 2016.
- Lecturer, Department of Computer Science and Engineering in Mangalam College of Engineering, Kottayam, Kerala, India teaching undergraduate for 3.9 years, August 2006 – November 2009. Awarded “Best Teacher award”.
- JAVA Developer Engineer with nearly one year of experience in the IT industry (RPS

Solutions- Bangalore, India) August 2005 – August 2006.

Publications

- [1] Ayain John, Navya Damodar, Bharathy Vijayan, N. Sasikala, and Shilpa Sudheendran, "AI Based Speech Synthesis and Cloning Using Natural Language Processing Models: A Comparative Analysis," in Proceedings of the 6th International Conference on Artificial Intelligence and Smart Energy (ICAISE 2026), Springer Nature Switzerland, pp. 248–260, May 2026, https://doi.org/10.1007/978-3-032-23544-2_20.
- [2] Ayain John and S. Santhanalakshmi, "AI-Driven Diagnosis of Autism Spectrum Disorder Using Retinal Fundus Imaging: A Comparison of Traditional and Deep Learning Feature Extraction Methods," Journal of Computational and Cognitive Engineering, published online 18 August 2025, <https://doi.org/10.47852/bonviewJCCE52026045>.
- [3] Ayain John and S. Santhanalakshmi, "Explainable AI Solutions for Emotion Understanding in Autism Spectrum Disorder," in ICT Systems and Sustainability: Proceedings of ICT4SD 2024, Springer Nature Singapore, 2025, https://doi.org/10.1007/978-981-97-9523-9_22.
- [4] C. S. S. Krishna Kaushik, Prathit Panda, P. S. S. Asrith, M. Patrick Rozario, and Ayain John, "Computer Vision Integrated Website," International Journal of Innovative Technology and Exploring Engineering, vol. 13, no. 2, pp. 20–25, January 2024, <https://doi.org/10.35940/ijitee.B9783.13020124>.
- [5] Ayain John and Tripty Singh, "MOD-DHGN for Autism Segmentation," Procedia Computer Science, vol. 218, pp. 621–630, January 2023, <https://doi.org/10.1016/j.procs.2023.01.044>.
- [6] Ayain John et al., "Health Care Chatbot," International Research Journal of Computer Science, August 2022.
- [7] Ayain John et al., "Module to Determine the Nature of a Two-Wheeler Using Accelerometer," Gradiva Review Journal, September 2022.
- [8] Ayain John et al., "Survey Issues on Internet of Things," SSRN 3812063, 2021.
- [9] Ayain John, G. R. Yashwanth, S. C. Chinmaya, J. Vasudha, and V. Sadhana, "Query Mesh: Accelerating Journalistic Discovery from Data to Insights," in Innovations in Cybersecurity and Data Science: Proceedings of ICICDS 2025, Springer Nature, pp. 83–95, 2026
- [10] Ayain John, Sagar S., Venkatadri V., and Gourav Gargey N. R., "An Intelligent Multi-Modal Fusion Approach for Brain Tumor Detection Using Deep Learning," conference paper, February 2026.
- [11] Ayain John, Shreerama D. S., S. Shreyas, U. Sagar, and Prajwal, "Fusion-Based Deep Learning Model for Autism Detection from Eye-Tracking Data," 2025 International Conference on Electrical, Communication, and Computing Technologies (iCONECCT), December 2025, <https://doi.org/10.1109/iCONECCT67014.2025.11470134>.

- [12] Ayain John, Rakshitha S., Arjun H. C., Darshan U., and Rakshith B. S., "InVision AI: An Eye for the Blind," Proceedings of the 6th International Conference on Electronics and Sustainable Communication Systems (ICESC 2025), pp. 1968–1980, 2025, <https://doi.org/10.1109/ICESC65114.2025.11212268>.
- [13] Ayain John, Shreerama D. S., S. Shreyas, U. Sagar, and Prajwal, "Voice Genius: IT's Echoes of Intelligence," 15th International Conference on Computing, Communication and Networking Technologies (ICCCNT), 2024, <https://doi.org/10.1109/ICCCNT61001.2024.10724739>.
- [14] Raye Haarika and Ayain John, "Enhancing Customer Retention through Feature Selection and XGBoost Classification for Churn Prediction," 2024 International Conference on Smart Systems for Applications in Electrical Sciences (ICSSES), pp. 1–7, May 2024, <https://doi.org/10.1109/ICSSES62373.2024.10561442>.
- [15] Ayain John, Navya Damodar, Mohith N., and Bharathy Vijayan, "Understanding Red Wine Quality with Feature Importance in Machine Learning and Explainable AI," international conference paper, June 2024.
- [16] R. Anil Prasad, Ayain John, Harika Gandiboina, and Gopika Jayadev, "Waste Product Identification to Assist EPR Using Object Detection," International Conference on Computing and Networking Technology, 2024.
- [17] "An Efficient Method of Image Inpainting on the Basis of Non-Harmonic Analysis," International Conference on Convergent Innovative Technologies (ICCIT), 25–26 April 2014.
- [18] "Survey of Infrastructure Planning and Research Management," International Conference on Computer Science and Information Technology (ICCSIT), 17 February 2013.
- [19] "Recognition of Misbehavior Routing in MANETs," First National Conference on Advanced Computing Systems (NCACS), 20 March 2009.
- [20] "Detection of Routing Misbehavior in MANET," National Conference on Emerging Trends in Advanced Computing, 24 February 2009.
- [21] "Keyword Clusters for Automatic Document," Fourth National Conference on Recent Trends in Advanced Computing, 6 October 2008.
- [22] "A Study of Efficient and Robust Multicast Routing in Mobile Ad Hoc Networks," Third National Conference on Recent Trends in Advanced Computing, 5 October 2007.

International Conferences:

- [1] Ayain John, Navya Damodar, Bharathy Vijayan, N. Sasikala, and Shilpa Sudheendran, "AI Based Speech Synthesis and Cloning Using Natural Language Processing Models: A Comparative Analysis," in Proceedings of the 6th International Conference on Artificial Intelligence and Smart Energy (ICAISE 2026), Springer Nature Switzerland, pp. 248–260, May 2026, https://doi.org/10.1007/978-3-032-23544-2_20.
- [2] Ayain John and S. Santhanalakshmi, "Explainable AI Solutions for Emotion Understanding in Autism Spectrum Disorder," in ICT Systems and Sustainability: Proceedings of ICT4SD 2024, Springer Nature Singapore, 2025, https://doi.org/10.1007/978-981-97-9523-9_22.
- [3] Ayain John and Tripty Singh, "MOD-DHGN for Autism Segmentation," Procedia Computer Science, vol. 218, pp. 621–630, January 2023, <https://doi.org/10.1016/j.procs.2023.01.044>.
- [4] Ayain John et al., "Survey Issues on Internet of Things," SSRN 3812063, 2021.
- [5] Ayain John, G. R. Yashwanth, S. C. Chinmaya, J. Vasudha, and V. Sadhana, "Query Mesh: Accelerating Journalistic Discovery from Data to Insights," in Innovations in Cybersecurity and Data Science: Proceedings of ICICDS 2025, Springer Nature, pp. 83–95, 2026
- [6] Ayain John, Sagar S., Venkatadri V., and Gourav Gargey N. R., "An Intelligent Multi-Modal Fusion Approach for Brain Tumor Detection Using Deep Learning," conference paper, February 2026.
- [7] Ayain John, Shreerama D. S., S. Shreyas, U. Sagar, and Prajwal, "Fusion-Based Deep Learning Model for Autism Detection from Eye-Tracking Data," 2025 International Conference on Electrical, Communication, and Computing Technologies (iCONECCT), December 2025, <https://doi.org/10.1109/iCONECCT67014.2025.11470134>.
- [8] Ayain John, Rakshitha S., Arjun H. C., Darshan U., and Rakshith B. S., "InVision AI: An Eye for the Blind," Proceedings of the 6th International Conference on Electronics and Sustainable Communication Systems (ICESC 2025), pp. 1968–1980, 2025, <https://doi.org/10.1109/ICESC65114.2025.11212268>.
- [9] Ayain John, Shreerama D. S., S. Shreyas, U. Sagar, and Prajwal, "Voice Genius: IT's Echoes of Intelligence," 15th International Conference on Computing, Communication and Networking Technologies (ICCCNT), 2024, <https://doi.org/10.1109/ICCCNT61001.2024.10724739>.
- [10] Raye Haarika and Ayain John, "Enhancing Customer Retention through Feature Selection and XGBoost Classification for Churn Prediction," 2024 International Conference on Smart Systems for Applications in Electrical Sciences (ICSSSES), pp. 1–7, May 2024, <https://doi.org/10.1109/ICSSSES62373.2024.10561442>.
- [11] Ayain John, Navya Damodar, Mohith N., and Bharathy Vijayan, "Understanding Red Wine Quality with Feature Importance in Machine Learning and Explainable AI," international conference paper, June 2024.

- [12] R. Anil Prasad, Ayain John, Harika Gandiboina, and Gopika Jayadev, "Waste Product Identification to Assist EPR Using Object Detection," International Conference on Computing and Networking Technology, 2024.
- [13] "An Efficient Method of Image Inpainting on the Basis of Non-Harmonic Analysis," International Conference on Convergent Innovative Technologies (ICCIT), 25–26 April 2014.
- [14] "Survey of Infrastructure Planning and Research Management," International Conference on Computer Science and Information Technology (ICCSIT), 17 February 2013.

National Conferences:

- [1] "Recognition of Misbehavior Routing in MANETs," First National Conference on Advanced Computing Systems (NCACS), 20 March 2009.
- [2] "Detection of Routing Misbehavior in MANET," National Conference on Emerging Trends in Advanced Computing, 24 February 2009.
- [3] "Keyword Clusters for Automatic Document," Fourth National Conference on Recent Trends in Advanced Computing, 6 October 2008.
- [4] "A Study of Efficient and Robust Multicast Routing in Mobile Ad Hoc Networks," Third National Conference on Recent Trends in Advanced Computing, 5 October 2007.

Conference Attended

- International Conference on Electronics and Sustainable Communication Systems (ICESC 2025)
- International Conference on Soft Computing for Security Applications (ICSCSA 2025)
- International Conference on Information and Communication Technology for Sustainable Development (ICT4SD)
- International Conference on Machine Learning and Data Engineering (ICML 2023)
- International Conference on Artificial Intelligence and Smart Energy
- International Conference on Innovations in Cybersecurity and Data Science
- International Conference on Computing, Communication and Networking Technologies (ICCCNT 2024)
- International Conference on Smart Systems for Applications in Electrical Sciences

Awards

- Selfless Service Award, Christ Academy School, Bengaluru.
- Best Teacher Award, Mangalam College of Engineering, Kerala.
- Certificates of appreciation for teaching, academic excellence and institutional service.
- Recognition for achieving 100% results in subjects handled for B.E. and M.Tech. students.
- Reviewer for Frontiers journals, IEEE Access, ICAISC, ICDSNS and other national and international journals and conferences.

Academic Activity

- Curriculum delivery and course coordination.
- Student mentoring, class advising and project supervision.
- Internship evaluation and examination-related activities.
- Question-paper setting, answer-script evaluation and result analysis.
- Guidance for machine learning, deep learning, web development and artificial-intelligence projects.
- Course-outcome assessment and programme-outcome mapping.
- Preparation of rubrics, question banks and course-exit survey analysis.
- Laboratory coordination and practical examination duties.
- Academic documentation, course-file preparation and quality-assurance activities.
- Contribution to accreditation, academic audits and departmental activities.
- Student counselling, academic progress monitoring and remedial support.
- NBA and NACC Coordinator at AMC Engineering College.

Faculty Development Activity/Workshops

- International Conference on Electronics and Sustainable Communication Systems (ICESC 2025)
- International Conference on Soft Computing for Security Applications (ICSCSA 2025)
- International Conference on Information and Communication Technology for Sustainable Development (ICT4SD)
- International Conference on Machine Learning and Data Engineering (ICML 2023)
- International Conference on Artificial Intelligence and Smart Energy
- International Conference on Innovations in Cybersecurity and Data Science
- International Conference on Computing, Communication and Networking Technologies (ICCCNT 2024)
- International Conference on Smart Systems for Applications in Electrical Sciences

Patents

- Patent published in the field of Machine Learning dated 16/09/2022 titled "Detection of Defects in Textile Fabrics Using Weave Pattern Recognition and Classification Based on Machine Learning Technique." Application No.: 202241049042 A.
- Patent published in the field of IoT and Machine Learning dated 27/02/2021 titled "IoT-Based Smart Farming Using Machine Learning." Application No.: 202141008351.
- Patent published in the field of Medical Image Processing and Deep Learning dated 14/02/2025 titled "Self-Learning Image Restoration Framework for Medical Imaging Using Sparse Feature Extraction and Deep Reinforcement Learning." Application No.: 202541010769.
- Patent filed in the field of Computer Science dated 19/08/2025 titled "An Automated Floor Plan Generation System Using Diffusion-Based Neural Networks." Application No.: 202541078490.

- Patent published in the field of Communication dated 02/01/2026 titled “Real-Time Botnet Detection Using Machine Learning and Live Network Traffic Analysis.” Application No.: 202541123318.
- Patent published in the field of Computer Science dated 20/03/2026 titled “Intelligent Visual Perception for the Blind.” Application No.: 202641026845.

Books Published

- Research Methodology. Charulatha Publications, Chennai. ISBN: 978-93-5577-108-7. Authored by Dr. R. Chinnaiyan, Ayain John, and Rachana V. Murthy. Published in December 2021. Available through Charulatha Publications.

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