

Dr. Rashmi B S

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Education

Professional:

- ❖ Ph.D (2020) : Obtained doctoral degree under the guidance of Dr. Nagendraswamy H.S. Professor, Department of Studies in Computer Science, University of Mysore, Mysore 570 006.
- ❖ M.Phil (2007) : M.Phil in Computer Science from Mother Teresa Women's University, Kodaikanal.
- ❖ M.Sc (2006) : Master of Science in Information Technology from Karnataka State Open University, Mukthagangothri, Mysore 570 006.

Additional:

- ❖ K-SET (2011) Qualified in Computer Science and Applications of Karnataka State Eligibility Test (2011) Examination.

Professional Experience

- ❖ 6th December 2012 onwards – Serving as Assistant Professor, Department of Studies and Research in Information Technology, Karnataka State Open University, Mukthagangothri, Mysore 570 006.
- ❖ 1st June 2006 to 5th December 2012 – Served as Assistant Professor, Department of Computer Science, Teresian Degree College, Siddarthanagar, Mysore 570 011.

Professional Recognition

Academics:

- ❖ Chairperson-Department of Studies and Research in Information Technology, KSOU, Mysore.
- ❖ Guiding students of M.Sc Information Technology and MBA IT Project works.

Administration:

- ❖ Nodal Officer, ICT Cell, KSOU, Mysore
- ❖ Special Officer (IT), KSOU, Mysore
- ❖ MOOCs Coordinator, KSOU, Mysore
- ❖ Member-Committee for Preparation of Curricular Aspects (NAAC)
- ❖ Nodal Officer, E-Governance Cell, KSOU, Mysore.
- ❖ NAAC Committee Member Criterion 3.

Academic Interest

- ❖ **Areas of Interest:** Microprocessor, Programming paradigms, Object Oriented Programming, Operating System, Computer Architecture, Analysis and Design of Algorithms, Computer Networks, Data Analysis, Digital Image Processing.
- ❖ **Research Interest:** Image and Video Processing, Pattern Recognition, Computer Vision, Fuzzy Logic, Machine Learning, Artificial Intelligence, Data Science, Data Analysis.

Research Recognition

- ❖ Presently guiding five research scholars across various domains.
- ❖ Serving as reviewer for National /International Conferences and Journals.
- ❖ Published/presented papers in International Conferences.

Member of Academic Bodies

- ❖ Special Invitee-BOS (MSc), Karnataka State Open University (2013)
- ❖ Chairman-BOE, Virtual Education Trust (2013)
- ❖ Chairperson-BOS(DIT), Karnataka State Open University (2013)
- ❖ Chairperson-BOS(PGDIT), Karnataka State Open University (2013)
- ❖ Member-BOE , Virtual Education Trust (2013)
- ❖ Chairman-BOE(MSc IT, DIT), Karnataka State Open University (2013)
- ❖ Chairperson-BOE(MSc, PGDIT, DIT), Karnataka State Open University (2014)
- ❖ KSOU Nominee- BOS Bharathi Post Graduate College, Chennai (2014)
- ❖ KSOU Nominee-BOS, SikshyaBikasha Trust, Bhubaneshwar (2014)
- ❖ KSOU Nominee-BOS, Virtual Education Trust, New Delhi (2014)
- ❖ Member-BOE (MSc IT, PGDIT, DIT), Karnataka State Open University(2016)
- ❖ Member-BOE (MSc IT, PGDIT, DIT), Karnataka State Open University (2019)
- ❖ Member-BOS (Composite BOS -MSC, PGDIT, DIT, Karnataka State Open University (2019)
- ❖ Chairperson-BOE (MSc IT/IS, PGDIT, DIT), Karnataka State Open University (2020)
- ❖ Chairperson-BOE (MSc IT/IS, PGDIT, DIT, UGCICT), Karnataka State Open University (2022)
- ❖ Co-opt BoE member, Dept. of MBA, KSOU, Mysore(2022).
- ❖ Member, Department Research Committee Karnataka State Open University (2022)
- ❖ Member, DAIP, Karnataka State Open University (2022)
- ❖ Chairperson-Composite BOS (MSc IT/IS, BSc IT, PGDIT, DIT, UGCICT), Karnataka State Open University (2022)
- ❖ Chairperson-Composite Editorial Committee (UG/PG-IT), Karnataka State Open University (2022)

Membership in Academic Bodies of other Universities/HEIs

- ❖ Member BoS -Centre of Information Science and Technology, University of Mysore.
- ❖ Member BoS -Dept. of Computer Science, Maharni's Science College for Women, Jhansi Laxmi Bai Road, Mysore.
- ❖ Member BoE -Centre of Information Science and Technology, University of Mysore.
- ❖ Member BoE -Dept. of Computer Science, PG Dept. of Computer Science, Mandya University, Mandya.

Resource Person

- ❖ Served as Chair Person to inaugurate the Tech Amateur IT Club and also delivered talk on "Green Computing" organized by Dept. of Computer Science, MMK and SDM Mahila Mahavidyalaya on 20th December 2022.
- ❖ Served as Convener for one day National Level Webinar on "Introduction to Artificial Intelligence (AI), Machine Learning and Applications" on 21st March 2022 organized by Department of Studies and Research in Information Technology, KSOU, Mukthagangothri, Mysuru,
- ❖ Served as Chair Person for Two Days National Level Conference on "Current Trends in e-Governance" organized by Dept. of Computer Science and Commerce Management, Govt. College, Mandya on 15th and 16th February 2020.
- ❖ Served as Resource Person for Two Days National Level Workshop on "Digital Image Processing using Python for beginners" organized by Dept. of Computer Science, JSS College for Women, Chamarajanagar on 18th and 19th January 2021.
- ❖ Served as Organizing Committee Member at International Conference on Data Analytics and Learning 2018 held on 30th and 31st March 2018 organized by Dept. of Studies in Computer Science, University of Mysore, Mysore.

Conference/Workshops/Seminars Attended

Workshop:

- ❖ One Day State Level Workshop on "Digital Image Processing using MATLAB", 28th March 2013, JSS College of Arts, Commerce and Science, Mysore
- ❖ Two Day's Workshop on "Self Learning Material Development", 7-10-2013 to 8-10-2013, KSOU, Mysore.
- ❖ Three Day National Level Workshop on "Mathematics behind Machine Learning" 21st to 23rd August 2014, Sri Jayachamarajendra College of Engineering, Mysore.
- ❖ Two Days workshop on "Capacity Building for Sakala Implementing Officers", Administrative Training Institute Mysore, 17-02-2014 to 18-02-2014 Government of Karnataka
- ❖ One Day Workshop on "Accelerating Gross Enrolment Ratio in Education- issues and challenges" by Karnataka State Open University, Mysore and Dept. of Higher education, Bangalore on May14th 2015.
- ❖ One Day Workshop on "Intel HPC Code Modernization Workshop 2015", DoS in Computer Science, University of Mysore, Mysore, 7th July 2015, High Performance Computing Centre

- ❖ Three days National Level Workshop on Big Data Hadoop, organized by DoS in Computer Science, University of Mysore, Mysore 29th to 31st October 2015, High Performance Computing Centre.
- ❖ Workshop on implementing ICT Initiatives Dept. of Higher Education, 16th and 17th July 2015, Karnataka Higher Education Council, Bangalore
- ❖ One Day Workshop on "Theoretical Aspects of Fuzzy C-means Clustering", Department of Studies in Computer Science, 11th February 2017, University of Mysore, Mysore.
- ❖ Attended Workshop on Choice Based Credit System (CBCS) On 19th July 2019 at Karnataka State Open University, Mysore.
- ❖ Attended One Day Workshop on "V-Labs: Advancing towards Virtual Experiments" organized by KSOU, Mysore on 3rd March 2020
- ❖ Attended Workshop on Choice Based Credit System (CBCS) On 5th November 2021 at Karnataka State Open University, Mysore.
- ❖ Participated in the National Webinar on "Intellectual Property Rights and its Relevance" organized by the Department of Studies and Research in Political Science, Karnataka State Open University, Mysuru on 28th June 2022.
- ❖ Attended Two Days Workshop on Development of Institution Open Education resource Policy for KSOU organized by Commonwealth Educational Media Centre for Asia (CEMCA) on 28th and 29th 2022 at KSOU, Mysore.

Conference:

- ❖ Two Day National Level Conference on "Current Trends in e-Governance" organized by Dept. of Computer Science and Commerce Management, Govt. College, Mandya on 15th and 16th February 2020.

Seminar:

- ❖ One Day State Level Seminar on Thoughts and Philosophy of Mahatma Gandhi on 16th October 2018 at KSOU, Mysore
- ❖ One Day International Seminar on "AI in Real Time : Challenges and Opportunities" organized by Department of Computer Applications, JSS Science and Technology University, Mysore on 13th January 2020.
- ❖ Attended National Seminar on "Life and Achievements of Sri Jayachamaraja Wodeyar" on 20th and 21st August 2019 at Karnataka State Open University, Mysore.

Online Webinars Attended

- ❖ Attended State Level Webinar on "ICT Initiatives in ODL System" held on 11-07-2020 organized by ICT Cell, Karnataka State Open University, Mysore.

Book Publications

- ❖ MSc Information Technology I Semester - MITDSE-1.6 C Programming Block No: 2 Units: 5-8 KSOU, ISBN No. 978-93- 83739-23-3.
- ❖ PG Open Elective I Semester ELMIT –01 Course Green Computing Block No: 1 & 2 Units: 9-16 KSOU, ISBN No. 978-93-83739-24-0
- ❖ BSc Information Technology I Semester - BITDSC-1 Fundamentals of IT and Digital Electronics Block No: 3 & 4 Units: 9-16 KSOU, ISBN No. 978-93-83739-25-7.

Research Publications

In Journals:

1. Rashmi, B. S., & Nagendraswamy, H. S. (2018). Effective Video Shot Boundary Detection and Keyframe Selection using Soft Computing Techniques. *International Journal of Computer Vision and Image Processing (IJCVIP)*, 8(2), 27-48.
2. Rashmi, B. S., & Nagendraswamy, H. S. (2020). Video shot boundary detection using block based cumulative approach. *Multimedia Tools and Applications*, 1-24.
3. Nandini, H. M., Chethan, H. K., & Rashmi, B. S. (2020). Shot based keyframe extraction using Edge-LBP approach. *Journal of King Saud University-Computer and Information Sciences*. <https://doi.org/10.1016/j.jksuci.2020.10.031>
4. Nandini, H. M., Chethan, H. K., & Rashmi, B. S. An Efficient Method for Video Shot Transition Detection Using Probability Binary Weight Approach. *International Journal of Computer Vision and Image Processing (IJCVIP)*. 2021 Jul 1;11(3):1-20.

In Conferences:

1. Rashmi, B. S., & Nagendraswamy, H. S. (2016, August). Abrupt Shot Detection in Video using Weighted Edge Information. In *Proceedings of the International Conference on Informatics and Analytics* (p. 69). ACM.
2. Kouser, K., Rashmi, B. S., & Rangarajan, L. (2016, August). Entropy Based Feature Selection for Lacunarity Analysis of Position Specific Motif Matrices of Promoter Sequences. In *Proceedings of the International Conference on Informatics and Analytics* (pp. 1-6).
3. Rashmi, B. S., & Nagendraswamy, H. S. (2016, September). Video shot boundary detection using midrange local binary pattern. In *Advances in Computing, Communications and Informatics (ICACCI), 2016 International Conference on* (pp. 201-206). IEEE.
4. Rashmi, B. S., & Nagendraswamy, H. S. (2016, December). Shot-based keyframe extraction using bitwise-XOR dissimilarity approach. In *International Conference on Recent Trends in Image Processing and Pattern Recognition* (pp. 305-316). Springer, Singapore.
5. Nandini, H. M., Chethan, H. K., & Rashmi, B. S. (2020, September). Abrupt Shot Change Detection using Midhinge Local Binary Pattern. In *2020 IEEE-HYDCON* (pp. 1-5). IEEE.
6. Nandini, H. M., Chethan, H. K., & Rashmi, B. S. (2020). Keyframe Extraction using Sobel Fuzzified Weighted approach. In *20th International Conference on Intelligent System Design and Applications (ISDA 2020)*, Springer
7. Nandini, H. M., Chethan, H. K., & Rashmi, B. S. "Video Shot Retrieval using Multi-Feature Approach"- in 5th International Conference on Information and Communication Technology for Intelligent Systems (ICTIS 2021) held during 23-24 April 2022.
