DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT

(Affilated to Visvesvaraya Technological University,Belagavi & Approved by AICTE,New Delhi)
Opp. Art of Living, Udayapura, Kanakapura Road, Bangalore- 560082
DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING
Accredited NBA, NAAC with A+, New Delhi

Faculty Name	**Dr. MADHUMALA RB**	
Academic Designation	**Associate Professor**	
Educational Qualification	**BE, M. Tech, Ph.D**	
Experience in Years	**14**	
Area of Interest	**Cloud Computing**	
Email ID	**Madhumala-ise@dsatm.edu.in**	

Educational Details

- ➢ Ph.D. (Cloud Computing): AUG:2016 – JAN:2021, JAIN (Deemed to be University), Bangalore
- ➢ M.Tech (Computer Science) - 2005-2007: Visvesvaraya technological university Belgaum, Karnataka
- ➢ B.E (Computer Science and Engineering) -1999-2003: Visvesvaraya technological university Belgaum, Karnataka

Personal Details

Date of Birth:02/04/1982
Hobbies: Reading, Cooking, Traveling
Languages Known: English & Kannada

ProfessionalExperience

- ➢ Currently working as an Associate Professorin Information Science and Engineering department at Dayananda Sagar Academy of Technology and Management
- ➢ Worked as Assistant Professor in Information Science and Engineering department at JAIN University from 2016 to 2022.
- ➢ Worked as Assistant Professor and HoD in Information Science and Engineering department at Coorg Institute of Technology, Coorg from 2011 to 2016.
- ➢ Worked as Assistant Professor in Computer Science and Engineering department at Karavali Institute of Technology, Mangalore from 2008 to 2011.
- ➢ Worked as Assistant Professor in Computer Science and Engineering department at

DonBosco Institute of Technology, Bangalore from 2007 to 2008.

Publications

JOURNAL PAPERS:

[1]. Madhumala R B, HarshvardhanTiwari and DevarajVerma C, "A Reliable Frame Work for Virtual Machine Selection in Cloud Datacenter Using Particle Swarm Optimization", International Journal of Mathematics and Computer Science, AMS (MOS) Subject Classification: 68W50.ISSN 1814-0432, Volume16, Issue No. 2, PP: 677–685, 2020.

[2]. Madhumala R B, HarshvardhanTiwari and DevarajVerma C, "Virtual Machine Placement Using Energy Efficient Particle Swarm Optimization in Cloud Datacenter" Cybernetics And Information Technologies. Volume 21, Issue No. 1, ISSN: 1314-4081, DOI: 10.2478/cait-2021-0005, 2021.

[3]. Madhumala R B, HarshvardhanTiwari and DevarajVerma C, "Hybrid Model for Virtual Machine Optimization in Cloud Data Center," 5th International Conference on Intelligent Computing and Control Systems (ICICCS), IEEE Xplore 2021, pp. 137-141, doi: 10.1109/ICICCS51141.2021.9432149.

[4]. Madhumala R B, HarshvardhanTiwari and DevarajVerma C, "An Improved Virtual Machine Placement in Cloud Data Center using Particle Swarm Optimization Algorithm", International Journal of Advanced Research in Engineering and Technology, ISSN - 0976-6499, Volume 11, Issue No. 8, DOI: 10.34218/IJARET.11.8.2020.074, 2020.

[5]. Madhumala R B, HarshvardhanTiwari and DevarajVerma C, "Resource Optimization in Cloud Computing using Particle Swarm Optimization", International Journal of Cloud Applications and Computing , IJCAC: Volume 12, Issue 2, Article 5. Special Issue Submission: Recent Advances in Computational Intelligence in Cloud Computing, Web of Science, eISSN: 2156-1826, IGI

[6]. Madhumala R B, HarshvardhanTiwari, "Virtual Machine Optimization using Nature Inspired Algorithms" International Journal for Research in Applied Science & Engineering Technology , ISSN: 2321-9653; Volume 8 Issue I, Jan 2019.

[7]. Madhumala R B and HarshvardhanTiwari, "A Survey on Nature Inspired Algorithms for Virtual Machine Optimization", International Journal of Science and Research (IJSR) ISSN: 2319-7064, Volume 9, Issue No. 1, DOI: 10.21275/ART20203610, 2019.

[8]. Madhumala R B "Enhancement of Lifetime Using Network Coding and Duty Cycle at Wireless Sensor Network", International Journal for Research in Applied Science & Engineering Technology (IJRASET), Volume 3 Issue VI, June 2015 IC Value: 13.98 ISSN: 2321-9653.

[9]. Madhumala R B, Ravichandra YB, "A MapReduce Framework for an Effective Scheduler Based on the Job Size in Hadoop", International

Journal of Science and Research (IJSR) ISSN (Online): 2319-7064 Index
Copernicus Value (2013): 6.14 | Impact Factor (2013): 4.438

[10].   RB Madhumala, S Chhetri, KC Akshatha, H Jain "Secure File
Storage & Sharing on Cloud Using Cryptography". IJCSMC, 2021, 10(5),
49–59. https://doi.org/10.47760/ijcsmc.2021.v10i05.005

CONFERENCE PROCEEDINGS:

[11].   Madhumala R B, Harshvardhan Tiwari , "A Review on Cloud
Computing Security Issues and Challenges", National Conference
RACSIT-JAIN   (Deemed-to-be   University),   DOI:
https://doi.org/10.5281/zenodo.572299. 2017.

[12].   Madhumala R B, Harshvardhan Tiwari, "Improved PSO for
Optimizing Virtual Machine in Cloud datacenter", National Conference
On Innovative Research Advances In Engineering Applications And
Processes, Jyothy Institute of Technology 2020.

[13].   Shashikala, H. K., Madhumala, R. B., Keerthana, C., Priyanka, S.,
Meghana, R., & Thanmai, Y. (2022, April). Smart Reminder SOS &
Emergency Detection Device. In 2022 IEEE International Conference on
Distributed Computing and Electrical Circuits and Electronics
(ICDCECE) (pp. 1-4). IEEE.

BOOK CHAPTERS:

[14].   Madhumala R.B., Tiwari H. (2020) Analysis of Virtual Machine
Placement and Optimization Using Swarm Intelligence Algorithms. In:
Haldorai A., Ramu A., Khan S. (eds) Business Intelligence for Enterprise
Internet of Things. EAI/Springer Innovations in Communication and
Computing. Springer, Cham. https://doi.org/10.1007/978-3-030-44407-
5_9.

[15].   Madhumala R B, HarshvardhanTiwari and DevarajVerma C
(2022) A Review of Particle Swarm Optimization in Cloud Computing.
In: Moh M., Sharma K.P., Agrawal R., Garcia Diaz V. (eds) Smart IoT for
Research and Industry. EAI/Springer Innovations in Communication and
Computing. Springer, Cham. https://doi.org/10.1007/978-3-030-71485-
7_5

[16].   Vineetha B., Madhumala R.B. (2021) Providing Security and
Managing Quality Through Machine Learning Techniques for an Image
Processing Model in the Industrial Internet of Things. In: Moh M., Sharma
K.P., Agrawal R., Garcia Diaz V. (eds) Smart IoT for Research and
Industry. EAI/Springer Innovations in Communication and Computing.
Springer, Cham. https://doi.org/10.1007/978-3-030-71485-7_10

[17].   Madhumala R B, HarshvardhanTiwari, "Virtual Machine Selection
Optimization   Using   Nature-Inspired   Algorithms"   Applied   Soft

Computing: Techniques and Applications, 2021 Apple Academic Press

.

Awards

1. Member of International Association of Engineers (IAENG - 155770).
2. Senior Member of IEEE society (IEEE - 97581280)
3. Member of Computer society of India, Karnataka, India.(CSI-F8003582)
4. Member of International Association of Computer Science and Information Technology (IACSIT- 80350762).
5. Toycathon-2021 Member of Evaluator sponsored by MHRD-INDIA, Ministry of Education, Ministry of Child and Development and Ministry of Education and Innovations cell. (https://toycathon.mic.gov.in/)
6. Member of the Board of Reviewer Personal and Ubiquitous Computing, Springer Nature. - https://www.springer.com/journal/779
7. Scientific and Technical Committee and Editorial Board Member, World Academy of Science, Engineering and Technology (WASET) U.S (www.waset.org)
8. Member of the Board of Reviewer for the "International Journal of Computer Science and Engineering "(http://www.iaset.us)
9. Reviewer for African Journal of Bio technology (DOI: 10.5897/AJB), Academic Journals (AJ) - https://academicjournals.org/journal/AJB.
10. Reviewer for Multimedia Tools and Applications- https://www.springer.com/journal/11042
11. Reviewer for Distributed and Parallel Databases- https://www.springer.com/journal/10619
12. Reviewer for International Conference on Smart Technologies in Computing, Electrical and Electronics (ICSTCEE 2020- https://www.icstcee-conference.org/) Reva University.
13. International Conference on Emerging Trends in Science, Engineering and Management-2021 (ICETSEM-2021) - Scientific Committee Member - https://icetsem.net/scientific-committee.php
14. International Conference on Futuristic Trends in Embedded Systems and Networking (ICFTEN 2021) – Reviewer and Scientific Committee Member https://icften.com/scientific-committee.php
15. International Conference on Emerging Electrical Systems and Control -2021 (ICEESC-2021) - Scientific Committee Member https://iceesc.com/scientific-committee.php

Academic Activity

- Internatonal Academic MoU Co-ordinatoor (YARSI UNIVERSITY-INDONESIA)
- Organized International Project Competition on 29th JUNE 2022
- Organized Cyber Safe Campus Institutional Event

- Coordinated with Research Cell activities
- Coordinated the NaaC and NBA accreditation process
- Conference, IEEE and Computer Society of India (CSI) Coordinator.
- Women Cell President (ISE).
- Advising and contributing Curriculum development at college for special topics to make sure that our students are industry-ready.
- Motivate the staff to use a vast array of learning approaches and technologies to develop great students.
- Source the outside resources for specialized training.
- Preparing specifications and budgets for the requirements of the subject-specific teaching tools and equipment, including laboratory equipment.

- Guided more than 100 UG Projects and 15 PG Projects
- Served as BoE for University Exams
- Served as a Question Paper setter for University Exam
- Worked as DCS for VTU Examinations
- Teaching –Learning sessions.
- Mentoring the students.
- Examination activities (Setting-up the question papers and Evaluation).
- IQAC and NBA Coordinator.
- Successfully discharged my additional responsibility of Deputy Chief Superintendent of VTU Examinations for 5 years.
- Delivery of the training sessions
- Schedule training sessions with the support of external resources.
- Coordinate all the departmental activities.
- Academic calendar planning and executing.

Faculty Development Activity/Workshops

- ➢ Attended Computational Intelligence and Cloud Computing (CICC-2020) from 13th to 17th January 2020 held at National Institute of Technology, Raipur .
- ➢ "BOSS Linux " conducted by IIT Bombay (online) , 6 days FDP_16th April to 21st April 2020 (BOSS Linux , Spoken tutorial project funded by MHRD, Govt of India) organized by KarmaveerBhauraoPatil College of Engineering, Maharastra.
- ➢ "Are You IoT Ready? Join Configuration of Smart Home using CISCO Packet Tracer" hosted by Department of Computer Science & Engineering, JAIN Deemed to be University, Bangalore, on May 23, 2020.
- ➢ "INDUSTRY PERSPECTIVE ON DATA SCIENCE AND CLOUD COMPUTING", from May 14, 2020 to May 16, 2020 through Online Pedagogy
- ➢ Data Visualization with R programming by codegnan IT solutions, May 15th, 2020.
- ➢ " VFD Basics, latest and future YASKAWA VFD'S, Mechatronics and Humatronics" conducted by Department of CSE,SCSE, JAIN Deemed to be University, Bangalore, held on 16th May 2020.

- ➢ Online Webinar on "SAP Analytics Cloud (SAC)" organised by Department of Computer Engineering, Sandip Institute of Engineering and Management on 12th May 2020.
- ➢ IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt., of India, Certificate for Completion of Python 3.4.3 Training on May 9th 2020.

Contact Details

Dr.Madhumala RB

Associate Professor, Department of Information Science & Engineering

Dayananda Sagar Academy of Technology & Management

Udayapura, Kanakapura Road

Bengaluru-560082

Mail ID: madhumala-ise@dsatm.edu.in

Phone No.:890 404 1529