

Dr. M. MRUNALINI MCA, M. Phil (Comp. Sc.), Ph. D



Professor

Department of Computer Applications

RV Institute of Technology and Management

Bangalore

Ph: 9448242841

Email: mrunalinim.rvitm@rvei.edu.in

Academic

- B. Sc., (Computer Science) from S. V. University, Andhra Pradesh in 1997
- Master of Computer Applications from, S V University, Andhra Pradesh in 2000
- M. Phil (Computer Science) from M S University, Tamilnadu in 2003
- Ph. D in Computer Applications from VTU, Belgaum, Karnataka in 2015

Additional Qualification

- ISO 9001:2015 Certified Quality Auditor

Professional Experience

Teaching Experience: 23 years

Research Experience: 17 Years

ISO Auditor: Conducted Internal Quality Audits

Areas of Specialization

- Big Data
- Machine Learning
- Software Security
- Data Warehouse-ETL Tools

Awards

- Got State Level award for the guidance of student project “Placement Portal”, “Project Invite” launched by IBM in Collaboration with Karnataka Government

Sponsored R&D Projects

1. Project Title: Development of Prosumer Driven Integrated Smart Grid
Responsibility: Co-Investigator
Funding Organization: Department of Science and Technology (DST)
Status: Completed
2. Project Title: Machine Learning Techniques for Data Mining based Intrusion Detection Systems
Responsibility: Co-Investigator
Funding Organization: DRDO
Status: Completed

Consultancy Projects

1. Project Name : Logistics for Shipping Corporation
Responsibility : Project Leader
Organization : 7H Group of Companies
2. Project Title : Patient Monitoring System
Responsibility : Project Leader
Organization : M.S. Ramaiah Dental College and Hospital, Bangalore
3. Project Name : Dialysis Management System
Responsibility : Project Leader
Organization : M.S. Ramaiah Memorial Hospital, Bangalore

In-house Projects

1. Project Name : Data Analysis Using 'R'- Case Study 1: Medical Decision Making for Urological Dysfunction, Case Study 2: Sleep Study Analysis
Responsibility : Project Supervisor
Organization : MSRIT
2. Project Name : Online Teaching Diary Maintenance
Responsibility : Project Supervisor
Organization : MSRIT
3. Project Name : OBE based Tool for Question Paper Generation
Responsibility : Project Supervisor
Organization : MSRIT

Publications

No. of Publications	: 33
International Journals	: 11
National Journals	: 01
International Conferences:	17
National Conferences	: 04
No. of Books	: 01
No. of Book Chapters	: 04
No. of Patents	: 3 Granted and 1 Published

Books

Dr. Chethan Venkatesh, Dr.Shiva Murthy.G, Dr. M.Mrunalini: Cloud Demystified: Computing in the 21st Century, Scientific International Publishing House, August, 2025.

Book Chapters

- Kimmi Kumari and M. Mrunalini (2026) Transforming Data Classification and Labeling with Large Language Models: Exploring Semantic understanding for Sustainable Applications. In: Raghavendra M Devadas, Vani Hiremani, Praveen Gujjar, Guru Prasad M. S. and Sunil Kumar R.M (eds) Transforming Education with Large Language Models: Exploring Applications for Sustainable Learning, Cambridge Scholars Publishing. ISBN (Ebook): 978-1-0364-6542-1
- Kurni M., Mrunalini M., Saritha K. (2022) Deep Learning Techniques for Social Media Analytics. In: Biswas A., Patgiri R., Biswas B. (eds) Principles of Social Networking. Smart Innovation, Systems and Technologies, vol 246. Springer, Singapore. https://doi.org/10.1007/978-981-16-3398-0_18
- Muralidhar Kurni and Mrunalini M (2022) Managing Health Insurance by using Blockchain Technology. In Malaya Dutta Borah, Roberto Moro Visconti, Ganesh Chandra Deka (eds) Blockchain in Digital Healthcare, 1st Edition, Chapman and Hall/CRC, ISBN 9780367678616
- M N Pushpalatha, M Mrunalini. (2021) Predicting the severity of open source bug reports using unsupervised and supervised techniques. In: Research Anthology on Usage and Development of Open Source Software, 676-692, IGI Global. DOI: 10.4018/978-1-7998-9158-1.ch035

Research Publications (last 5 Years)

1. Hybrid Cloud Backup using Confidential Computing, In proceedings of International Conference on Digital Technology and Engineering, 16th & 17th October 2025.
2. A Hybrid Model for Recommender System in Entertainment, In proceedings of IEEE International Conference on Computing for Sustainability and Intelligent Future (COMP-SIF 2025), pp: 1-6, March 2025.
3. Detecting Denial of Service attacks using machine learning algorithms. Journal of Big Data, Springer, 9, 56 (2022). <https://doi.org/10.1186/s40537-022-00616-0>; (Q1 Journal)
4. Classification of Liver Tumors from Computed Tomography Using NRSVM, Intelligent Automation & Soft Computing, Vol 33, Issue 3, pp 1517-1530; DOI:10.32604/iasc.2022.024786; (Q3 journal)

5. A Framework for Analysis of Incompleteness and Security Challenges in IoT Big Data, International Journal of Information Security and Privacy (IJISP) 16(2), IGI Global, pages: 1-13; DOI: 10.4018/IJISP.308305 (Q3 Journal)
6. Vulnerability Assessment and Mitigation Techniques on Hadoop Framework, International Journal of Knowledge Based Computer Systems, 2023, Vol 11, Issue 1, p1, ISSN 2321-5623
7. Predicting the Priority of Bug Reports using Classification Algorithms, Indian Journal of Computer Science and Engineering (IJCSE), Vol. 11 No. 6 Nov-Dec 2020, pages 811-818; DOI : 10.21817/indjcse/2020/v11i6/201106076
8. Vulnerability Assessment and Mitigation Techniques on Hadoop Framework. International Journal of Knowledge Based Computer Systems 11 (1), 2023
9. A Hybrid Model for Recommender System in Entertainment, In proc. Of International Conference on Computing for Sustainability and Intelligent Future (COMP-SIF), pp 1-6, 2025
10. IoT-Based Automatic Forest Fire Extinguisher, Proceedings of the 1st International Conference on Intelligent Healthcare and Computational Neural Modelling, pp.45-50, January 2025
11. Enhancing DeFi Consensus: Scaling Ethereum for Performance, Pre-Prints in Research Square, 2024. <https://doi.org/10.21203/rs.3.rs-4832980/v1>
12. Energy Trading using Ethereum Blockchain, Proceedings of ICTIS 2020, 15-16 May 2020, PP: 357-365

Patents

1. SMART OBSTACLE DETECTION DEVICE FOR SELF-DRIVING CAR, UK Patent, Design No: 6492985. Granted on 7th January 2025.
2. AN INTELLIGENT ANOMALY DETECTION SYSTEM FOR IOT NETWORKS USING EDGE COMPUTING & DEEP LEARNING, German Patent, No: 20 2025 102 503, Granted on 5th June 2025.
3. AI-BASED BRAIN CANCER DETECTION DEVICE, Indian Patent, Design No: 453592-001, Granted; n 16th July 2025.
4. A PEER TO PEER SECURE ENERGY TRADING SYSTEM AND A METHOD THEREOF, Patent Application No : 202141004314, date : 22.10.2021; Status: Published;

(M. Mrunalini)