

Name : Dr. F. Mary Magdalene Jane

Designation : Professor and Head

Department : Computer Science with Data Analytics

Qualification : M.C.A., M.Phil., Ph.D.

Experience : Teaching: 24.1 Years Industry: 1 Year Research: 4 Years

Area of Specialization(s) : Data Analytics, Data Management

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Academic Qualifications

Degree	Branch	Institution / University Name	Year of Graduation
Ph.D.	Computer Science	PSG College of Technology, Coimbatore	2010
M.Phil.	Computer Science	Manonmanium Sundaranar University	2003
M.C.A.	Computer Applications	Bharathiar University	1992
B.Sc.	Mathematics	Bharathiar University	1989

Projects

Completed

Project Title	Agency	Amount	Duration
Location-Based Services for Disaster Management	Tamilnadu State Council for Science and Technology	7,500	2018-19

Research Publications (Indexed)

International

- Mary Magdalene Jane F, **Exploring Knee Osteoarthritis Diagnosis Through Efficient Mixture Of Machine Learning And Deeplearning Models: A Comprehensive Review**, Indian journal of Natural Sciences, Vol 15 Issue 85, August 2024.
- N Ilayaraja, J Sherin, J Sandra, F Mary Magdalene Jane, **Weighted Road Network Distance-Based Data Caching Policy for Spatio-Temporal Data in Mobile Environment**, 04-Apr-2022, Edge Analytics: Select Proceedings of 26th International Conference—ADCOM 2020, pp. 527-537, Springer Singapore

- A. C. Soundarraj F. Mary Magdalene Jane, V. Pream Sudha, **Deep Learning Approach to Identify Abnormalities in Blood Cell Images**, 2022, International Journal of Health Sciences, Volume 6, Issue 5, pp. 2968-2976, DOI: 10.53730/ijhs.v6nS5.9305
- Mary Magdalene Jane F **WARM Based Data Pre-fetching and Cache Replacement Strategies for Location Dependent Information System in Wireless Environment**, Springer : Wireless Personal Communications, Vol 89.No.2, 2016
- P Jayasheelan, F Mary Magdalene Jane, **Effective route planning in road networks using multi constraint routing algorithm**, 03-Oct-2016, IEEE International Conference on Current Trends in Advanced Computing (ICCTAC), pp.1-6, IEEE
- Mary Magdalene Jane F, **Answering closest – pair nearest neighbor using Voronoi Diagram for Location dependent information system in mobile environment**, International Journal of Applied Engineering Research, Vol 10, No 2 pp. 7133 – 7145, 2015
- M Duraisamy, F Mary Magdalene Jane, **Cellular neural network based medical image segmentation using artificial bee colony algorithm**, 03-Jun-2014, International Conference on Green Computing Communication and Electrical Engineering (ICGCCEE), pp. 1-6, IEEE
- Mary Magdalene Jane F, **Semantic Data Caching Strategies for Location Dependent Data in Mobile Environments** Springer Series : Communications in Computer and Information Science, DICTAP (2), Vol. 167 , pp.151-165 , 2011
- F Mary Magdalene Jane, R Nadarajan, **Investigations on Client–Side Data Caching Policies for Location Dependent Data in Mobile Environments**, 09-Aug-2010, Anna University
- Mary Magdalene Jane F, **A Spatio-Temporal Cache Replacement Policy for Location Dependent Data in Mobile Environments**, International Journal of Business Data Communications and Networking, Vol. 6, No. 3, pp. 31-48, 2010
- Ilayaraja N, Mary Magdalene Jane F. (2010), **Service type based Cache Replacement Policy for location dependent data in mobile environments**, Mathematical and Computational Models: Recent Trends, pp.214-222.
- Nadarajan R Mary Magdalene Jane F., Ilayaraja N., Safar M, **Cache Pre-fetching and Replacement strategies for Location Dependent Data**, 2009, Journal of Digital Information Management, Volume 7, Issue 3, pp. 185-190
- Mary Magdalene Jane F, **Cache Pre-fetching and Replacement strategies for Location Dependent Data in Mobile Environments**, Journal of Digital Information Management, Vol. 7, No. 3, pp.185-190., 2009
- Mary Magdalene Jane F , **A Cache Replacement Policy for Location Dependent Data**

in Mobile Environments, Next Generation Data Communication Technologies, pp 286-295,2009

- Mary Magdalene Jane F., Ilayaraja N., Safar M. and Nadarajan R. (2009), **Entry and Exit Probabilities based Cache Replacement Policy for location dependent data in mobile environments**, ACM proceedings of the International Conference on Advances in Mobile Computing and Multimedia, pp. 204-210.
- Mary Magdalene Jane F., Ilayaraja N., Safar M. and Nadarajan R. (2009), **Cache Prefetch and Replacement with Dual Valid Scopes for Location Dependent Data in Mobile Environments**, ACM proceedings of the International Conference on Information Integration and Web-based Applications and Services, pp. 362-369.
- Mary Magdalene Jane F., Parameswaran R., Nadarajan R. and Safar M. (2008), **PINE-Guided Cache Replacement Policy for Location-Dependent Data in Mobile Environment**, ACM Proceedings of the International Conference on Pervasive Technologies Related to Assistive Environments, Vol. 282:16.
- Mary Magdalene Jane F **Restricted Continuous KNN Queries on Road Networks with Caching Enhancement**, Journal of Digital Information Management, Vol. 6, No. 1, pp. 38-50, 2008
- Mary Magdalene Jane F., Yaser Nouh, Nadarajan R. and Safar M. (2008), **Network Distance Based Cache Replacement Policy for Location-Dependent Data in Mobile Environment**, IEEE Proceedings on Ninth International Conference on Mobile Data Management Workshops, pp.177-181.
- Mary Magdalene Jane F., Safar M. and Nadarajan R. ,**Weighted Angular Distance Based Cache Replacement Strategy For Location Dependent Data In Wireless Environment**, International Conference on Digital Communications and Computer Applications (DCCA2007), Jordan University of Science and Technology.

Book Publications

- A Cache Replacement Policy for Location Dependent Data in Mobile Environments, 2012, Next Generation Data Communication Technologies: Emerging Trends, pp. 286-295, IGI Global Scientific Publishing
- Mobile Code and Security Issues, Mobile Computing: Concepts, Methodologies, Tools, and Applications, Volume 6, 2009, Chapter 196 Pp. 2568-2582, IGI Global ISBN13: 9781605660547
- Mobile Code and Security Issues, 2009, Mobile and Ubiquitous Commerce: Advanced E-Business Methods, pp. 256-270, IGI Global
- A Cache Replacement Policy for Location Dependent Data in Mobile Environments, 2009,

Next Generation Data Communication Technologies, pp. 286-295, IGI Global DOI: 10.4018/978-1-61350-477-2.ch013

- Mobile Code and Security Issues (pages 75-92), 2007, Web Services Security and E-Business, pp. 75-92, IGI Global ISBN13: 9781599041681
- Mobile and Ubiquitous Commerce: Advanced E-Business Methods Pages 256-270 chapter Mobile Code and Security Issues
- Web Services Security and E-Business, Chapter 4, pp. 75-92, Chapter Title: Mobile Code and Security Issues

Presentations in Conference

International

- **Weighted Road Network Distance Based Data Caching Policy for Spatio-Temporal Data in Mobile Environment**, International Conference on Advanced Computing and Communications ADCOM2020, National Institute of Technology, Silchar, December 16-18, 2020
- **Deep Learning Approach to Identify Abnormalities in Blood Cell Images: A Review**, International Conference on Image Analysis for Treatment of Human Infectious Diseases, Kumaraguru College of Technology, Coimbatore November 6-7, 2020.
- **Semantic Data Caching Strategies for Location Dependent Data in Mobile Environments** International Conference on Digital Information and Communication Technology and Its Applications, DICTAP 2011, Dijon, France, 21-June -2011.
- **Entry and Exit Probabilities based Cache Replacement Policy for location dependent data in mobile environments**, International Conference on Advances in Mobile Computing and multimedia, Asia e University – Kuala Lumpur, Malaysia, 15- December 2009
- **Cache Prefetch and Replacement with Dual Valid Scopes for Location Dependent Data in Mobile Environments**, International Conference on Information Integration and Web-based Applications and Services, Asia e University – Kuala Lumpur, Malaysia, 16 -December 2009
- **Network Distance Based Cache Replacement Policy for Location-Dependent Data in Mobile Environment**, International Conference on Mobile Data Management (MDM 2008), Renmin University of China , Beijing, China, 28-April -2008
- **Weighted Angular Distance Based Cache Replacement Strategy For Location Dependent Data In Wireless Environment**, International Conference on Digital Communications and Computer Applications (DCCA2007), Jordan University of Science

and Technology, Jordan, 19- March-2007.

Participation in Conference

International

- International Conference on Advances in Mobile Computing & Multimedia (MoMM2009), Asia e University – Kuala Lumpur, Malaysia, 14-16 December 2009.
- International conference on Mobile Data Management (MDM 2008), Renmin University of China , Beijing, China, April 27-30, 2008
- International Conference on Digital Communications and Computer Applications (DCCA2007), Jordan University of Science and Technology, Jordan, March 19-22, 2007

National

- UGC sponsored National Conference on Distributed networks , Gobi Arts and Science College, Gobichettipalayam, 26-03-2005-27-03-2005
- NAAC sponsored National Conference on Curricular Innovations and Quality Improvement in Autonomous colleges, Arul Anandar College, 01-10-2005
- UGC sponsored national conference on Networking and Multi agent systems, Gobi Arts and Science College, Gobichettipalayam, 25-09-2004-26-09-2004

Participation in Seminars

- Business Analytics and Intelligence, Indian Institute of Management, Bangalore, 23-06-2018-24- 06-2018
- International Seminar on Research in computers, Why, What and how, Bharathiar University, 10- 02-2012
- Seminar on Recent Research Trends in Computer Science, Madurai Kamaraj University, Madurai, 27-01-2006
- AICTE sponsored seminar on Rural Upliftment through Information Technology, P.S.G.R. Krishnammal College for women, Coimbatore, 19-09-2003
- UGC sponsored seminar on Recent Trends in Information Technology, Gobi Arts and Science College, Gobichettipalayam, 02-03-2002
- UGC sponsored seminar on Impact of Information Technology on strategic Managerial Decisions, P.S.G.R. Krishnammal College for women, Coimbatore, 06-02-2002

Participation in Workshop

- CSI sponsored workshop on **Problem Solving and Python Programming**, Dr. N.G.P. Institute of Technology, 09.09.2017
- NITTTR Workshop on **Strategies for Effective Teaching and Learning**, Dr. N.G.P.

Institute of Technology, 29.06.2016-27.06.2016

- TEQIP sponsored **Quality Improvement Cell workshop**, Government College of Technology, Coimbatore, 23-01-2014
- **Allan Turing Centenary Year Workshop on Art of Computing**, PSG College of Technology, Coimbatore, 7.12.2012 -8.12.2012
- MSME sponsored National workshop on **Intellectual Property Rights**, PSG College of Technology, Coimbatore , 04-04-2009.
- NAAC sponsored National workshop on “**Quality Assurance: A post Accreditation Mandate**“ GVG Visalakshi College, Udumalpet , 22.06.2005.

Participation in Faculty Development Programme

- **Research Methodology and Pedagogy of Tertiary Education**, Dr.N.G.P. Arts and Science College, Coimbatore, 15-Jun-21 to 21-Jun-21.
- “**Entrepreneurship: Pathfinder for National Development**”, Avinashilingam Institute for Home Science and Higher Education for Women, 14-10-19 to 25-10-19
- **Advanced Statistical Modeling and Data Science**, IMT, Ghaziabad, 24.05.2019-26.05.2019
- **Strategies for Effective Teaching and Learning by NITTTR**, Dr. N.G.P. Institute of Technology, 29.06.2016-27.06.2016
- **Web and Grid Services**, MIT campus, Anna University, Chennai, 16.11.04 to 29.11.04.
- **Wireless Technology** , Anna University, Chennai during , 20.12.02-21.12.02

Conference / Seminar / Workshop Organized

- Convenor- National Conference on “**Multimedia Signal Processing and Networking**” Dr. NGP Institute of Technology, Coimbatore, 30-10- 2010
- Coordinator - National level workshop on “**Rapid Miner Tool**” , Dr. N.G.P. Institute of Technology, Coimbatore, 08-10-2010
- Coordinator -Workshop on **Android Operating System** by Dr. Jey Veerasamy, Professor, University of Texas, USA, 13-07-2012.
- Coordinator -Workshop on **Cloud based CRM Services** by Mr.Hari Prasad Jella, CRM Architect, USA at Dr. N.G.P. Institute of Technology, 16-03-2013

Invited Speaker / Session Chair- Conference / Seminar / Workshop

- Resource Person – Seminar on “ Demystifying Big Data“ at Department of Computer Science , Dr.G.R.D Damodaran College of Science, 16th March ,2020

- Resource Person - DBT funded Workshop on "Big Data Analytics and Applications in Bioinformatics", Vellalar College for Women , 27-09-2018.
- Session Chair - CSI 2016 annual convention, Le Meriden, Coimbatore, 24-01-2017
- Session Chair - National Conference on advanced trends in computer technology, Dr. N.G.P. Arts and Science College, Coimbatore, 03.02.2012
- Resource Person – Inservice Training for Post Graduate Teachers in Computer Science, Vellalar College for women, Erode, 20-10-97 – 24-10-97

Editorial / Review Board Member

- International Conference on Computational Models, Cyber Security and Computational Intelligence 2017
- International Conference on Computational Intelligence, Cyber Security and Computational
- National Conference on “Recent Trends in Network and Database Technologies 2013.
- Springer International Conference on Signal and Image Processing (ICSIP) 2012
- ACM International Conference on Management of Emergent Digital Eco Systems (MEDES), 2010.
- The International Conference on Web Information Systems and Technologies (WEBIST) (2010)
- International Conference on Information Integration and Web-based Applications and Services iiWAS (2010)
- International Conference on Computational Science and Applications (ICCSA 2009)
- International Conference on Digital Information Management (ICDIM) (2009)

Recognition National / International

Nature of Recognition	Organization / Institution	Year
TCS Research Fellowship	Tata Consultancy Services	2007

Membership in Professional Bodies

Name of the Professional Body	Nature of membership	Duration
Indian Society for Technical Education (ISTE)	Life-time	-
Analytic Society of India (ASI)	Annual	-

Member in BoS

- Subject Expert, Department of Computer Science (Aided), Ramakrishna Mission Vidyalaya, Coimbatore, 2024–2025 to 2026–2027