

Dr. M. Gunasekaran MCA, M.Phil, Ph.D

Assistant Professor (SS) & Head
Department of Computer Science,
Government Arts and Science College,
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OBJECTIVES

- Serve the community through teaching and scientific publications
- Generate a funded research project in Soft Computing that involves research students

Academics

Course	Year	Institution	Class
Ph. D. (Computer Application)	2007-2013	Anna University, Chennai	-
M. Phil. (Computer Science)	2002- 2004	Alagappa University	-
M.C.A (Computer Application)	1998-2001	Maharaja Engineering College, Bharathiar University	I Class
B.E.S (Electronic Science)	1993-1996	Sengunthar Arts & Science College, University of Madras	I Class

Professional Experience

Total Experience: 22 years and 2 months

Designation : **Assistant Professor & HOD of Computer Science**
Institution : Government Arts and Science College, Edappadi
Experience : 1 year & 2 months
Duration : 23-12-2022 to till now

Designation : **Assistant Professor & HOD of Computer Science**
Institution : Government Arts College, Dharmapuri
Experience : 3 years, 11 months & 20 days
Duration : 03-01-2019 to 22-12-2022

Designation : **Assistant Professor of Computer Science**
Institution : Government Arts College, Salem-7
Experience : 3 months and 22 days
Duration : 12-09-2018 to 02-01-2019

Designation : **Assistant Professor and HOD of Computer Science**
Institution : Government Arts College, Dharmapuri
Experience : 1 Year and 3 months
Duration : 16-06-2017 to 12-09-2018

Designation : **Assistant Professor and HOD of Computer Science**
Institution : Govt. Arts and Science College, Hosur

Experience : 1 Year and 7 months
Duration : 06-11-2015 to 15-06-2017

Designation : **Assistant Professor and HOD of Computer Science**
Institution : Govt. Arts and Science College, Thiruvadanai, Ramanathapuram Dist.
Experience : 3 months
Duration : 29-07-2015 to 05-11-2015

Designation : **Associate Professor of MCA**
Institution : Dayananda Sagar Academy of Technology & Management , Bangalore
Experience : 11 Months
Duration : 13-08-2014 to 27-07-2015

Designation : **Associate Professor of MCA**
Institution : Park College of Engineering & Technology
Experience : 13 Years 3 Months
Duration : 11-06-2001 to 08-08-2014.

Subjects Handled:

- Python Programming, Java Programming, Design and Analysis of Algorithms, Soft Computing, Social Computing, Digital Image Processing, Computer Graphics (100%), Multimedia Systems, Operating System, C Programming, Object Oriented Programming (100% - 2 times), Digital Fundamental and Computer Organization, System Software, Software Testing, Software Documentation (100%), Mobile Computing, Client Server System (100%), Software Quality Management (100%) and Data Structures for B.E, B.SC (CS), M.SC(CS), M.Sc. (S.E) and M.C.A.
- C Programming for Chinese students - B.Sc (CT).

Guidance of Project: For M.C.A – 60 students
For M.Sc. (S.E) – 5 students

Publications

http://scholar.google.co.in/citations?user=7S0__vUAAAAJ&hl=en

Journals

- L. Mathanprasad and **M. Gunasekaran**, "Analysing the Trend of Stock Market and Evaluate the performance of Market Prediction using Machine Learning Approach," 2022 International Conference on Advances in Computing, Communication and Applied Informatics (ACCAI), Chennai, India, 2022, pp. 1-9, doi: 10.1109/ACCAI53970.2022.9752616.
- Khanum, Seema; **Gunasekaran, M**; Rajiga, S V; Firos, A. "Parameterized Fuzzy Measures Decision Making Model Based System to Minimise Path Loss Problem in Wireless Communication Systems" NeuroQuantology, Vol. 20, Iss. 5, (2022): 3647 - 3651. DOI:10.14704/nq.2022.20.5.NQ22662
- T.H. Manoj, **M. Gunasekaran**, W. Jaisingh, "A BrainNet Classification Technique Based on Deep Convolutional Neural Network for Detection of Brain Tumor in FLAIR MRI Images " International Journal of Engineering and Advanced Technology 9 (1), 3264-3269, 2019-10-30
- Khanum S, **Gunasekaran M**, Rajiga S et al (2022) Intuitionistic Fuzzy Hamacher

Generalized Shapley Choquet Integral Operators Based Decision-Making Model for Feature Extraction and Automatic Material Classification in Mining Area Using Satellite Data. *Adv in Mater Sci Eng*.

- S.V. Rajiga, **M. Gunasekaran**, Early prediction of hydrocephalus using data mining techniques, *Adv. Comput. Intelligence Commun. Technol.* 2022; 263-272.
- Rathi , Dr. K. Srinivasan , **Dr.M. Gunasekaran** , Dr. J. Anitha"Quantum Shift Based Gaze Pattern Recognition Using Recurrent Neural Machine Learning Technique", *TURCOMAT*, vol. 12, no. 7, pp. 2617–2627, Apr. 2021.
- Rajiga SV, **Gunasekaran M** (2021) Techniques of image processing and segmentation in predicting hydrocephalus using magnetic resonance image. In: 7th international conference on advanced computing and communication systems (ICACCS) (1). IEEE, pp 1942–1945
- **M.Gunasekaran**, M.Sumathi,. " ACO based AODV Method for Detection and Recovery of Misbehaving Nodes" *Global Journal of Computer Science and Technology*, Vol.18. No.1-E, 2018. Online ISSN: 0975-4172
- S. Ramadass, **M.Gunasekaran**, "Review On Feature Selection Techniques in Data Mining", *International Journal of Computer Sciences and Engineering*, Vol-5, No.11, 2017, E-ISSN: 2347-2693.
- *M.Sumathi and M.Gunasekaran* " Survey on Different Technique for Detection and Recovery of Misbehaving Node in MANET", *International Journal of Research In Computer Application & Management*, Vol.7,No.12, 2017, ISSN 2231-1009.
- G. Madhammal *and M.Gunasekaran* "Comparative Study on K-Means, Ant, Bee, Firefly and Cuckoo of Nature Inspired Algorithms", *International Journal of Research In Computer Application & Management*, Vol.7,No.12, 2017, ISSN 2231-1009.
- Kumar, R.S., Nagarajan, B., Karthikamani, R. and **Gunasekaran, M.**, Region-Based Object Extraction using Adaptive Neuro-Fuzzy Inference System Combined with Support Vector Machine. *Asian Journal of Research in Social Sciences and Humanities*, 7(2), pp.412-427, 2017.
- **M. Gunasekaran** and V. Hari Prakash " Hybrid Intelligent System with Genetic Algorithm for Equity Portfolio Optimization", *International Journal of Advanced Engineering Science and Information Technology*, Vol.4, No.4, pp.10-15, 2014.
- **M.Gunasekaran** and Ramaswami, K. S. "A Hybrid Intelligent System of ANFIS and CAPM for Stock Portfolio Optimization", *Journal of Intelligent and Fuzzy Systems*, Vol. 26, No. 1, pp. 277-286, 2014.
- M.Arunbabu, K.P.Rajesh and **M.Gunasekaran**, "Initiative Ontology: Based on Provision Specification", *International Journal of Futuristic Trends in Engineering and Technology*, Vol.1, No.4, pp. 46-49, 2014.
- S. Sonika, K.P.Rajesh and **M.Gunasekaran**, "A Modular Key Sharing Method for Mobile Sensor Networks", *International Journal of Futuristic Trends in Engineering and Technology*, Vol.1, No.4, pp. 50-53, 2014.
- Indirajit Metya, K.P.Rajesh and **M.Gunasekaran**, "Remote System Monitoring and Controlling using Gmail Inbox(Atom/RSS) Feeds", *ACME International Journal of*

Multidisciplinary Research, Vol.2, No.5, pp. 18-23, 2014.

- S. Keerthika, K.P.Rajesh and **M.Gunasekaran**, "EAACK—A Safe Interruption Recognition System for MANETs", International Journal of Futuristic Trends in Engineering and Technology, Vol.1, No.4, pp. 59-62, 2014.
- M. Muthu Kumar@Amaresan, K.P.Rajesh and **M.Gunasekaran**, "Huge Statistics Analysis: Experiment and Result", International Journal of Futuristic Trends in Engineering and Technology, Vol.1, No.4, pp. 63-66, 2014.
- **M.Gunasekaran**, K.S.Ramaswami and S. Karthik "Integration of SRA, ANFIS and CAPM for stock portfolio management", CSI Transactions on ICT, December 2013, Vol.1, No.4, pp. 291-300, 2013. (Springer Publication)
- **M.Gunasekaran** and K.S.Ramaswami "Portfolio Optimization using Neuro Fuzzy System in Indian Stock Market", Journal of Global Research in Computer Science, Vol. 3, No.4, pp. 44-47, 2012
- **M.Gunasekaran** and K.S.Ramaswami "Evaluation of Artificial Immune System with Artificial Neural Network for Predicting Bombay Stock Exchange Trends", Journal of Computer Science, Vol. 7, No.7, pp. 967-972, 2011.
- **M.Gunasekaran** and K.S.Ramaswami "A Fusion Model Integrating ANFIS and Artificial Immune Algorithm for Forecasting Indian Stock Market". Journal of Applied Sciences, Vol. 11, No.16, pp. 3028-3033, 2011.

Books & Chapters:

Seema Khanum, S.V. Rajiga, L. Mathanprasad, M. Gunasekaran, A. Firos, "Parameterized Fuzzy Measures Decision-Making Model Based on Preference Leveled Evaluation Functions for Best Signal Detection in Smart Antenna", Big Data Analytics, 2022, pp 221-242, Auerbach Publications, eBook ISBN9781003307761

M GUNASEKARAN, SEEMA KHANUM, S.V. RAJIGA, "SPEECH RECOGNITION SYSTEM : Concepts and Techniques", 2020, Notion Press; 1st edition, ISBN-10 : 1637811276 ISBN-13 : 978-1637811276, 198 pages.

M GUNASEKARAN, S.V. RAJIGA, SEEMA KHANUM, "DIGITAL IMAGE PROCESSING A Beginners' Guide, 2020, Notion Press; 1st edition, ISBN-10 : 1637144598 ISBN-13 : 978-1637144596, 222 pages

Journal Reviewer

- Journal of Intelligent and Fuzzy Systems
- IEEE Transactions on Fuzzy Systems (TFS)
- International Journal of Computer Science and Application (IJCSA)
- Neural Computing and Applications (Springer Journal)
- Intelligent Automation & Soft Computing (Autosoft Journal)

Journal Editor

- International Journal of Advancements in Computing Technology(IJACT)
- International Journal of Contemporary Research in Computer Science and Technology
- International Journal In IT & Engineering

Presentations

International Conferences

- Firos, A., Khanum, S., Gunasekaran, M. (2021). A Survey on Plant Disease Detection Methods for Building a Robust Plant Disease Detection System. In: Marriwala, N., Tripathi, C.C., Jain, S., Mathapathi, S. (eds) Soft Computing for Intelligent Systems. Algorithms for Intelligent Systems. Springer, Singapore. https://doi.org/10.1007/978-981-16-1048-6_15
- TH Manoj, **M Gunasekaran**, "An outline: Segmentation of blood vessels, veins and Artery in MRA" IEEE International Conference on Innovative Mechanisms for Industry Applications (ICIMIA), pp. 364-368, 2017.
- T.H Manoj, **M Gunasekaran**, M Sathishkumar, "Enhanced Security for Automated Captcha Recognition in Web Pages", IEEE International Conference on Soft-Computing and Network Security (ICSNS), 2015.
- **M.Gunasekaran**, K.P. Rajesh and S. Karthik, "Adaptive Neuro Fuzzy Inference System for White Blood Cell Classification", 2nd International Conference on Innovative Research in Engineering and Technology (iCIRET2013), ISBN-978-8-1924-2185-8, 2013.
- M. Vairavaraja and **M. Gunasekaran** "Iterative Curvature Based Interpolation for Image Upscaling", 2nd International Conference on Innovative Research in Engineering and Technology (iCIRET2013), ISBN-978-8-1924-2185-8, 2013.
- K.S.Gayathri, **M.Gunasekaran** "Integrating Geometric Transformation with Cancelable Template", International Conference on Mathematical Modeling and Applied Soft Computing (MMASC 2012), 2012.
- **M.Gunasekaran**, B.Menaka "Unsupervised Pixel Classification in Satellite Imagery using Artificial Neural Network", 2nd International Conference on Science, Engineering and Technology (SET 2011), 2011.
- K.P.Rajesh, K.S.Ramaswami, **M.Gunasekaran** "Fuzzy Logic Transformation Method to Video Transmission through Bluetooth" International Conference on Sensors, Security, Software and Intelligent Systems (ISSIS 2009), pp 50-54, 2009.
- **M.Gunasekaran**, K.S.Ramaswamy and K.P.Rajesh "Fuzzy Decision Making System for Stock Market" International Conference on Sensors, Security, Software and Intelligent Systems (ISSIS 2009), pp 40-43, 2009.

National Conferences

- **M.Gunasekaran** and S.Ganeshmoorthy "Tamil Script Recognition System using Hierarchical Multilayered Neural Network", National Research Conference on Challenges & Innovations in Information Technology (CIIT -2010), pp 252-256, 2010
- **M.Gunasekaran**, S.Prabhakaran and C.Balamurugan "Dynamic Webpage Management System" National Conference on Technological Advancements in Data Mining, pp 28-32, 2010.
- **M. Gunasekaran**, S. Anitha and S. Kavipriya "Neuro Fuzzy based Stock Market

Prediction System” , Second National Conference on Signal Processing, Communications and VLSI Design (NCSCV'10), pp 354-359, 2010

- **M. Gunasekaran** and R. Lavanya “Internal & External Virtualization Private Network using Enhanced DES” Second National Conference on Signal Processing, Communications and VLSI Design (NCSCV'10), pp 1-5, 2010.
- **M. Gunasekaran** and S.Ganeshmoorthy “OCR Recognition System Using Feed Forward and Back Propagation Neural Network” Second National Conference on Signal Processing, Communications and VLSI Design (NCSCV'10), pp 345-350, 2010
- **M. Gunasekaran**, C.Balamurugan and S.Prabhakaran “Tracing Object in Motion Using CAT”, Second National Conference on Signal Processing, Communications and VLSI Design (NCSCV'10), pp 239-243, 2010
- **M. Gunasekaran**, and V. Hari Prakash “ Hybrid Intelligent System with Genetic Algorithm for Equity Portfolio Optimization” Second National Conference on Signal Processing, Communications and VLSI Design (NCSCV'10), pp 340-345, 2010

Research Guidance/Supervisorship

- Anna University, Chennai (Ref. No:23.07.15 – Lr.No:SUPR/23rd RB/DB Dated: 20-03-2014) for Ph.D and M.S (By Research)
- Bharathiar University, Coimbatore (Guide ID No: COS-GU3688 /2013) for Ph.D Computer Science under Category –B.
- Karpagam University, Coimbatore (O.M.No: R/EG/A5/05/2014/249 Date:28-03-2014) for Ph.D and M.Phil.
- Periyar University, Salem (Ref. No: PU/R/RD3/06147/2015 Dated: 07-01-2016) for Ph.D and M.Phil (CS)

M.Phil (CS) : Completed – 3 Students

Ph.D (CS) : Guiding – 4 students

Orientation & Refresher Courses:

- Participated in 28 days Orientation Programme(General) from 10-05-2017 to 06-06-2017 conducted by UGC-HRDC , University of Madars, Chennai.

Seminars & Workshops

- Participated in a one day national workshop on “Recent Trends in Topology” organized by Coimbatore Institute of Technology dated 28th Jan 2011.
- Participated in the IBM Roadshow on “High Performance Computing (HPC)” organized by Coimbatore Institute of Technology dated April 8-9, 2011 and sponsored by IBM India Pvt. Ltd.
- Participated in a one day workshop on “LATEX – A tool for Research Articles” organized by the Dept. of Computer Applications, Sri Ramakrishna Institute of Technology, Coimbatore dated 12th August 2011.
- Participated in a one day workshop on “MATLAB with Fuzzy Logic Toolbox” organized by the Dept. of Computer Applications, Sri Ramakrishna Institute of Technology, Coimbatore dated 17 April 2010.
- Participated in National Seminar on “Research Methodology in Computer Science

and Engineering” was organized by UG & PG Depts. of Computer Applications, Sri Vasavi College, Erode dated 27-02-2009 and 28-02-2009.

- Participated in Workshop on “Ingraining Research Attitude in Teachers” which was organized by The Research Cell, Dept of EEE, Park College of Engg. & Tech., Coimbatore dated 28-08-08.
- Participated in “CIT-IBM Research Promotion Programme (RPP) on Information Management” which was organized by Coimbatore Institute of Technology dated 08-08-08 and 09-08-08 and sponsored by IBM India Pvt. Ltd.
- Participated in the one day workshop on “Emerging Management Concepts and Trends for the New Millennium” held at Maharaja Engineering College, Avinashi on 28-10-1999.

Faculty Development Programs (FDP)

- Participated two times in the Staff Development Program organized by Outreach Foundation India, Coimbatore in the year 2008 and 2010.
- Participated in the Faculty Development Program conducted by The Southern Human Resource Development Academy, Chennai on 29th June 2001 and 5th July 2001.

Responsibilities Held

- Acted as **Chair Person** in the National Conference on Green Computing Technologies, NCGCT-2015 at Dayananda Sagar Academy of Technology and Management, Bengalure on 7th May 2015.
- Organized a 15th Regional Workshop on Science Writing /Journalism from 04-02-2014 to 08-02-2014 at Park College of Engineering and Technology in association with National Council for Science & Technology Communication (NCSTC), Govt. of India, New Delhi and M.T.S Academy, Chennai as **Workshop Coordinator**.
- Acted as **Chair Person** in the International Conference on Innovative Research in Engineering and Technology (iCIRET2013) at Park College of Engineering and Technology, Coimbatore during January 3-5, 2013.
- Functioned as **Organizing Committee Member** in the International Conference on Mathematical Modeling and Applied Soft Computing (MMASC 2012) conducted by Department of Mathematics, Coimbatore Institute of Technology, Coimbatore held from 11-13, July 2012.
- Functioned as **Rapporteur** in the International Conference on Innovative Research in Engineering and Technology (iCIRET2010) at Park College of Engineering and Technology, Coimbatore during August 12-14, 2010.
- Conducted a one day National Technical Symposium (ZzoomM’ 07 & ZzoomM’ 08) being a coordinator.
- Worked as an ISO Internal Auditor, Mentor for group of students, Internal Exam Coordinator, Convener of various college functions, Coordinator of Education Expo (Dinamalar’s Valzhikatti and Daily Thanthi’s Vetri Nitchayam, etc.), in-charge of Anna University Continuous Affiliation and AICTE Extension Approval of MCA.

- Acted as Question Paper setter for Anna University – Coimbatore and Kumuraguru College of Technology (KCT) Autonomous – Coimbatore, Govt. Arts College, Salem-7.
- Acted as Anna University Representative (UR) for the university theory examination.

National Service Scheme

- Working Experience: 7 years and 5 months

Functioned as **NSS Programme Officer** from June 2002 to 29-10-2009 and conducted 7 NSS Special camp and numerous regular activities.

- o Attended 10 days Orientation Course from 1st Dec 2003 to 10th Dec 2003 at TOC, Avinashilingam Deemed University, Coimbatore.
- o Attended 5 days Refresher course from 15th Nov 2005 to 20th Nov 2005 at TOC, Avinashilingam Deemed University, Coimbatore.
- Received **Appreciation Certificate** from Anna University Chennai for actively participating in the *Tsunami Relief Activities 26/12*, during December 2004.
- Acted as Presiding Officer for Tamil Nadu Local Body Election duty on 15-10-2006 and 19-10-2011 at Ganapathipalyam, Coimbatore.

Professional Membership

- **ISTE** - Lifetime Membership in Indian Society for Technical Education, India (M.No: LM 70573 Year : 2010)
- **CSTA** -Lifetime Membership of Computer Science Teachers Association, ACM,USA. (M.No: 8642265)
- **UACEE** -Lifetime Associate Member of Universal Association of Computer and Electronics Engineers, UK (M.No: AM1004392 Dt: 12-09-2013)
- **IACSIT** - Lifetime Membership of International Association of Computer Science and Information Technology, Singapore (M.No: 80347339 Dt: 11-09-2013)
- **IAENG** -Lifetime Membership of International Association of Engineers, Hong Kong. (No: 134081 Dt:17-09-2013)

Personal Details

Date of Birth : 24-06-1976

Nationality : INDIAN

Gender : Male

Marital Status : Married

Blood Group : A1 +ve

Mobile : 94430-83837

Present Address : 6, Amman Nagar, Vaikuntham Road,
Konganapuram -637102. Salem DT

Premanent Address : S/O C. Muthusamy Retired Head Master,
Poosarikadu, Erumaipatty (PO)

Konganapuram (VIA), Edappadi(TK)
Salem(DT) Pin - 637102.
Tamilnadu, INDIA

References

Dr.K.S.RAMASWAMI, Ph.D

Head, Department of Mathematics,
Coimbatore Institute of Technology,
Coimbatore .
Ph: 98940 – 43062

Dr.K.P.Rajesh, MCA, M.Phil, Ph.D

Dean of Computer Science,
Park's College (Autonomous)
Chinnakarai, Tirupur – 5.
Ph: 94437-43341.

Declaration

I, hereby, declare that the information furnished above is true to the best of my knowledge and belief.

PLACE : Coimbatore

Yours faithfully,

DATE : 25-02-2019

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