

Faculty Profile



Dr. M. Gayathri Lakshmi Msc., M.phil., Ph.D
Assistant Professor (SG) – Mathematics

HIGHLIGHTS:

- Number of Journal Publications: 6
- H-Index: 2
- Project Funding Received: NIL
- Patents Published: NIL
- Patents Granted: NIL

PROFESSIONAL LINKS:

- Scopus ID: 57218897687
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57218897687>
- Google Scholar
- <https://scholar.google.com/citations?user=U0K4aUoAAAAJ&hl=en> Anna University Faculty ID: 278142
- AICTE Faculty ID:1-2334813963
- Anna University Supervisor ID: NIL
- LinkedIn: NIL

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 18.4 years
- Industrial Experience: Nil

INTERNATIONAL EXPOSURE:

- ACMC 2023, 12th Asian Conference on Membrane Computing, September 26-09-2023, Chengdu, China, Presented a paper on "Parallel Contextual Array Insertion Deletion P Systems and a Variant of Array Rewriting P Systems".
- ACMC 2022, 11th Asian Conference on Membrane Computing, September (6-9) 2022, UP Diliman, Quezon City, Philippines, Presented a paper on "Parallel Contextual Array Insertion Deletion P Systems and Array Rewriting P Systems with Pure 2D Context-free Rules", pages 16-40 in proceedings.
- International conference on Automation and Renewable systems (ICACRS-2022), Presented a paper on "Pre-Trained Xception Model- based COVID Detection using CXR images" organized by Mount Zion College of Engineering and Technology, Pudukkottai, Tamil Nadu (21/04/21 –23/4/21)

- Presented a paper on “Weighted Hexagonal Picture Automata” in 10th International workshop on Weighted Automata: Theory and Applications (WATA) -2021, April 20-23, CIRM @ Marseille, France.
- 12/03/2020 to 13/03/2020-National Conference on Advances in Science, Humanities and Technology, Presented a paper on “Modified Jarratt- Type methods with Optimal Fourth Order Convergence”, Saveetha School of Engineering, Chennai

AREA OF SPECIALIZATION:

- Formal Languages and Automata theory (Theoretical Computer Science)
- Graph theory
- Cryptography

Ph.D. DETAILS:

Title of Thesis: A Study on Generative Power of Parallel Contextual Array Insertion Deletion P Systems with Applications

COURSES CERTIFIED: IUCEE - International Educator Certification Program

IIT Swayam – NPTEL (12 Weeks)

- Accreditation and Outcome Based Learning
- Data Analytics using Python /Mentor
- Mathematical Modelling and Analysis
- Social Networks /Mentor
- Graph theory
- Discrete Mathematics
- Research Methodology

ACHIEVEMENTS AND AWARDS:

- 2015-16: Academic Excellence Award producing good result in Mathematics-I
- 2016-17: Best Teacher Award for Academic Excellence in Mathematics-I
- 2016-17: Best Teacher Award for Academic Excellence in Transforms and Partial Differential Equations.
- 2017-18: Teacher of the Year, producing good result in Transforms and Partial Differential Equations.
- 2019-20: Teacher of the Year, Academic Achievement and personal growth in publishing a journal paper, “Collaborative Learning using Learning Styles in Green cloud Environment”.
- 2022-23: Top Performing Mentor awarded by Swayam NPTEL in 2022.
- July to Dec 2023: Awarded “Certificate of Appreciation as NPTEL Motivated Learner”
- Dec 2023: Received Best Paper presentation award in 6th International conference on Information Systems and Management Science 2023, Conducted by university of Malta, IIT Bhilai, India, “Enhance Multiple convolutional Neural Networks based CCSP system for Precise Classification in membrane System- Based Applications”.

SPECIAL SESSIONS DELIVERED: Delivered a Motivational talk on Career guidance for XI and XII Standard students in various school.

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- 11/04/2014- National conference on Emerging trends in Science and Humanities - 2014, Saveetha Engineering College, Chennai.
- 10/04/2015 -National conference on Emerging trends in Science and Humanities 2015, Saveetha Engineering College, Chennai.
- 25/05/2015 to 30/05/2015- Training Programme on Introduction to Design of Algorithms, IIT Kharagpur, Conducted by MHRD, Government of India. Chennai.
- 30/10/2015 Workshop on Teaching Mathematics for Engineering students, Loyola-ICAM College of Engineering and Technology, Chennai.
- 27/11/2015 One day workshop in Queuing theory, Saveetha Engineering college, Chennai.
- 27/11/2015 One day Workshop on Queueing Theory, Loyola-ICAM College of Engineering and Technology, Chennai.
- 08/12/2015 to 18/12/2015-ISTE Short Term Training Program on Engineering Physics, National Mission on Education through ICT, IIT Bombay, Chennai.
- 04/03/16 -National workshop on Building Confidence in Gen Y Learners to Speak English, Saveetha Engineering College, Chennai.
- 22/07/2016- Faculty development programme on Applications of Transforms in Engineering, Rajalakshmi Institute of Technology, Chennai.
- 04/02/2017- One day Hands on training in Latex, Saveetha Engineering College, Chennai.
- 09/03/17 -One day Workshop in Fuzzy set theory and it applications, SRM University, Chennai.
- 14/09/17 to 12/10/17-Pedagogy for online and Blended Teaching-Learning Process-IIT Bombay, Saveetha Engineering College, Chennai.
- 03/08/17 to 07/09/17-Foundation Program in ICT for Education, Saveetha Engineering College.
- 17/02/18 FDP on "Skill Development in Research, Projects and Patent Filing", Saveetha Engineering College, Chennai.
- 08/03/18 to 12/04/18-Foundation programme in ICT for education Bombay-IIT Bombay.
- 21/07/18- One day workshop in Linear Algebra, Saveetha Engineering College,
- 31/08/2018 Workshop on Engineering Instruments and Applications, Saveetha Engineering College, Chennai.

- 30/10/18 on Fuzzy set Theory and its applications at SRM University, Ramapuram, Chennai.
- 26/11/18 to 27/11/18-Faculty development and training programme on “Research methodology, SEC, Chennai.
- 26/11/2018 to 27/11/18- FDP on Research Methodology -Tools and Techniques in Engineering, Saveetha Engineering College, Chennai.
- 2019 Jan - Six months course, Latex Training, GIET University, Spoken Tutorial project, IIT, Bombay, MHRD Govt., of India.
- 12/06/2019 - FDP on Algebra and Number Theory, Rajalakshmi Institute of Technology, Chennai
- 28/06/19 –29/06/19 -Two days’ workshop on Algebra and Number Theory, Saveetha Engineering College, Chennai.
- 28/6/19 to 29/6/19-Two days’ workshop on Algebra and Number Theory, Saveetha Engineering college, Chennai.
- 03/08/2019 Workshop on Fuzzy Optimization Algorithms on MATLAB, Saveetha Engineering College, VIT, Chennai.
- 09/11/2019 One day workshop on R, Teaching Learning Centre, ICT at IIT BOMBAY, MHRD, Govt of India, held at SEC, Chennai.
- 20/12/19 -One day National workshop on Recent Trends in Fuzzy Rough Set Theory and Graph theory Applications, S.A Engineering College, Chennai.
- 7/6/2021 to 12/6/2021-One Week FDP on Applicable mathematics and programming in science and Technology, Saveetha Engineering College, Chennai.
- 26/7/2021 to 30/7/2021-AICTE - 5 days Online workshop on Inculcating Universal Human Values in Technical Education and Presented in first year induction programme in the topic: Harmony in family, Saveetha Engineering College, Chennai.
- 9/08/2021 to 14/08/2021-Hands on training in visual components, Saveetha Engineering College, Chennai.
- 9/9/21 to 13/9/21-Mathematical Development in Cryptography and Data Science, Saveetha Engineering College, Chennai.
- 24/09/2021 to 26/9/2021-Citation Management in Scholarly writing - Tools and Techniques, Siva Sivani institute of Management, Secunderabad Engineering College, Chennai.
- 1/2/2022 to 30/4/2022- Saveetha Teaching Learning Centre conducted short term course on Educating the millennials, Saveetha Engineering College, Chennai.

- 12/06/2023 to 16/06/2023 -Five days FDP on "Leap into Fuzzy Logic Applications", Vellore Institute of Technology, Chennai.
- 19/06/2023 to 23/06/2023- Five days FDP on "Applications of Fuzzy Set Theory in Data Science", Vellore Institute of Technology, Chennai.

Journal Publications:

- 1.Enhanced Multiple Convolutional Neural Networks Based CCS P System for Precise Classification in Membrane System-Based Applications
MG Lakshmi, GAF Vinodhini, G Nagappan, DG Thomas
International Conference on Information Systems and Management Science, 2024•Springer.
2. Parallel Contextual Array Insertion Deletion Grammars, Pure 2D Context-Free Grammars and Associated P Systems M. Gayathri Lakshmi , G. Arul Freeda Vinodhini , T. Kamaraj , D.G. Thomas Published Theoretical Computer Science, Volume 987, 1 March 2024, 114351, Elsevier, Annexure (Q2).
3. M.Gayathri Lakshmi, G. Arul Freeda Vinodhini , Jayasankar , D.G. Thomas G Ar., "Parallel ContextualArray Insertion Deletion P Systems and Array Rewriting P Systems with Pure 2D Context-free Rules", published in Journal of membrane Computing, Scopus indexed journal (2023), Springer.
4. Dr.Karthikeyan Thangavel,M.G. Lakshmi S. Sathiya Priya Sathiyandrakumar , “Detecting and Securing Internet of Things from Wormhole attacks in a Wireless Sensor Networks, Proceedings of the Sixth International Conference on Intelligent Computing and Control Systems (ICICCS 2022), IEEE Xplore Part Number: CFP22K74-ART; ISBN: 978-1-6654-1035-9.
5. Pre-Trained Xception Model-based COVID Detection using CXR Images
MG Lakshmi, K Singh, RB Jeyavathana, VS Goud, A Deepak, 2022 International Conference on Automation, Computing and ..., 2022•ieeexplore.ieee.org
6. Collaborative Learning Using Learning Styles in Green Cloud Environment. S Vindhya, S Rajakumari, R Vanathi, MG Lakshmi., Volume-10, Issue-7, July 2020 in Journal of Green Engineering (JGE)/Volume-10, Issue-7, July 2020

PROFESSIONAL MEMBERSHIPS: Member in International Indian Statistical Association