



Dr. Lian Mathew M.Sc, Ph.D

Assistant Professor · Department of Mathematics

PROFILE

My academic focus is on making mathematics intuitive and application-oriented, with an emphasis on connecting mathematical theory with computational tools. My research interests include applied mathematics, computational complexity, mathematical modelling and interdisciplinary applications of mathematics.

APPOINTMENT

Joined 14 January 2026 · Teaching 5 years · Industry 1 year · Research 3 years

SPECIALISATION

Graph Theory · Computational Complexity · Applied Mathematics

RESEARCH INTERESTS

Graph Theory · Computational Complexity · Applied Mathematics

QUALIFICATIONS

Ph.D — Mathematics

University of Madras

Thesis: On Variants of Graph Pebbling & Its Applications

2024

EXPERIENCE

Assistant Professor

CHRIST University, Lavasa Campus · Teaching

November 2022 – Jan
2026

Guest Faculty

Stella Maris College(Autonomous), Chennai · Teaching

July 2022 – April
2023

Assistant Professor on Contract

Devamatha College, Kuravilangadu · Teaching

July 2018 – March
2019

JOURNAL PAPERS

- [1] "Bound for Secure Vertex Cover Pebbling Number of a Hypercube Towards Sustainable Transportation for Circular Economy," *Advances in Sustainable Engineering*, pp. 199-203, 2026.
- [2] "Secure Vertex Cover Pebbling Number for Variants of Trees," *Advances and Applications in Discrete Mathematics*, vol. 42, no. 2, pp. 177-190, 2025.
- [3] "On Secure Vertex Cover Pebbling Number," *Asian-European Journal of Mathematics*, vol. 16, no. 10, 2024.
- [4] "NDC Pebbling Number for Some Class of Graphs," *Journal of Combinatorial Mathematics and Combinatorial Computing*, vol. 119, pp. 121-128, 2024.
- [5] "A Hybrid Approach for Predictive Maintenance Monitoring of Aircraft Engines," *Contemporary Computing and Communications*, vol. 1, pp. 1-6, 2024.
- [6] "Facial Expression Recognition with Transfer Learning: A Deep Dive," *Trends in Quantum Computing and Emerging Business Technologies*, pp. 1-5, 2024.
- [7] "Parkinsons Disease Progression Prediction using Advanced Machine Learning Techniques," *Electrical Electronics and Computing Technologies (ICEECT)*, vol. 1, pp. 1-5, 2024.
- [8] "Non-split Domination Cover Pebbling Number for Families of Middle Graphs," *Proceedings of the International Conference on Mathematical Sciences and Applications*, pp. 24-29, 2024.
- [9] "Maximal Matching Cover Pebbling Number for Variants of Hypercube," *Proyoccenies Journal of Mathematics*, vol. 42, no. 4, pp. 931-956, 2023.
- [10] "Integer Cordial Labeling for Some Families of Graphs," *Ratio Mathematica*, vol. 42, pp. 105-114, 2022.

[11] "On Maximal Matching Cover Pebbling Number," *Advances and Applications in Mathematical Sciences*, vol. 21, no. 11, pp. 6281-6302, 2022.

[12] "Secure Domination Cover Pebbling Number for Join of Graphs," *Indian Journal of Science and Technology*, vol. 15, no. 27, pp. 1344-1348, 2022.

[13] "On Secure Total Domination Cover Pebbling Number," *Communications in Mathematics and Applications*, vol. 27, no. 1, pp. 105-122, 2021.

[14] "Integer Cordial Labeling for Variants of Graphs," *Advances in Mathematics: Scientific Journal*, vol. 9, no. 9, pp. 7483-7489, 2021.

[15] "Secure Domination Cover Pebbling in Variants of Complete graphs," *Advances and Applications in Discrete Mathematics*, vol. 27, no. 1, pp. 105-122, 2021.

CONFERENCE PAPERS	[1] "Maximal Matching Cover Pebbling Number for Variants of Hypercube," in <i>International Conference on Emerging Trends in Applied Mathematics</i> , International, Mount Carmel College, Bengaluru, 21-22, April.
BEST PAPER PRESENTATION AWARD - INTERNATIONAL CONFERENCE ON EMERGING TRENDS IN APPLIED MATHEMATICS	

PATENTS & IPR	[1] Lian Mathew, S Vijayalakshmi, Suman D, Nilima Gaikwad, Bansode Lawrence Sandeep, Cerlin Roheta, "Smart Bluetooth Enable Travel Trolley," Patent, No. 202421042576. PUBLISHED
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TALKS & EVENTS	Mathematical Foundations of Economic Theory Invited talk · Government Degree College Khansahib, Budgam, Jammu & Kashmir · Kashmir March 2025
	Introduction to Algorithms with Mathematical Applications Invited talk · JNRM College, Port Blair, Andaman · Andaman September 2024
	From Algorithms to Insights: The Role of Algorithms in Data Science Invited talk · St. Joseph's College, Moolamattom September 2024
	The Complexity Frontier: Exploring P, NP, and NP-Complete Problems Invited talk · Loyola College (Autonomous), Chennai · Chennai July 2024
	Algorithmic Foundations: Key Methods and Techniques Invited talk · Devamatha College, Kuravilangadu · Kuravilangadu July 2024

CERTIFICATIONS	Calculus for Machine Learning & Data Science Coursera · 4 weeks 2025
	Linear Algebra for Machine Learning & Data Science Coursera · 4 weeks 2025
	Programming for Everybody(Getting Started with Python) Coursera · 4 weeks 2025

AWARDS & HONOURS	Summer Faculty Research Fellowship IIT Delhi 2025
	Summer Faculty Research Fellowship IIT Delhi 2024
	Indian Academy of Science Fellowship Indian Academy of Sciences 2016

LANGUAGES	Malayalam · English · Tamil
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