Basic Details:

- **Name:** Mrs. R. Senthamizh Selvi
- **Designation**: Assistant Professor
- **PhoneNumber:** 9941758955
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- **Area or Subject:** Mathematics/Graph Theory
- **Affiliation:** Department of Mathematics, SRM Institute of Science and Technology, Ramapuram.

Educational Details:

- **Degree, University, Awarded Year**
  - B.Sc., Mathematics, Thiruvalluvar University, 2007, Government Arts College, Tiruvannamalai, TamilNadu.
  - M.Sc., Mathematics, Anna University, 2009, College of Engineering, Chennai, TamilNadu.
  - M.Phil., Mathematics, University of Madras, 2010, Madras Christian College, Chennai, TamilNadu.
  - **SET - Mathematical sciences, TNSET 2016, Mother Teresa Women's University, TamilNadu.**
  - Ph.D.(Pursuing), SRM University, 2022, SRM Institute of Science and Technology, Ramapuram, Chennai, TamilNadu.

Research Interests: Graph Theory.

Publications:

- NIL

Academic Experience:

- Working as Assistant Professor in SRM Institute of Science and Technology, Ramapuram, Chennai from 12th September 2022 to till date.
- Worked as Assistant Professor in Aalim Muhammed Salegh College of Engineering, Chennai from 9th October 2017 to 30th April 2019.

- Worked as Assistant Professor in Sree Sastha Institute of Engineering and Technology, Chennai from 18th August 2011 to 9th May 2017.
- Worked as Lecturer in Kamban Engineering College, Chennai from 21st June 2010 to 25th May 2011.

Other Professional Experience: NIL

Other Details:

Achievements and Awards:

- Published an **Indian Patent** No. 15300, titled **"Graph-Based Multi-Robot Coordination: A Decentralized Approach Using Dynamic Graphs"** by the Controller General of Patents, Designs & TradeMarks on 15.02.2025.
- Published an **Indian Patent** No. 15367, titled **"Graph-Based Drug Discovery: AI-Driven Molecular Interaction Analysis Using Graph Theory"** by the Controller General of Patents, Designs & TradeMarks on 15.02.2025.
- Completed "Basic Linear Algebra" **NPTEL** Online certification in **Elite with 5% Topper** (73%, 8 week Course) – 2025.
- Completed "One Health" **NPTEL** Online certification in Elite with **Silver along with FDP** (82%, 12 week Course) – 2024.
- Completed "Multivariable Calculus" **NPTEL** Online certification with **Elite with Silver** (75%, 8 week Course) – 2024.
- Completed "Developing Soft Skills and Personality" **NPTEL** Online certification in **Elite with Silver along with FDP** (61%, 8 week Course) – 2024.
- Completed "Probability and Statistics" **NPTEL** Online Certification Course with **Elite along with FDP** (61%, 12 week Course) – 2023.
- Completed "Graph Theory" **NPTEL** Online Certification Course with **Elite along with FDP** (68%, 8 week Course) – 2023.
- Completed "Introduction to Abstract and Linear Algebra" **NPTEL** Online Certification Course with **Elite along with FDP** (68%, 8 week Course) – 2018.
- Qualified "**TamilNadu State Level Eligibility**" **(TNSET) Test – 2016**.
- Received Award for providing **above 90% results** by Sree Sastha Institute of Engineering and Technology, Chennai.

Papers Presented in international/national conferences:

- Presented a paper entitled "Decagonal Graceful Labeling for some family of trees" in the International Conference on "Progress in Mathematics Towards Industrial Applications (PMTIA-2024)" organized by Department of Mathematics, SRM Institute of Science and Technology, Ramapuram, Chennai held from 18.10.2024 to 19.10.2024.

- Presented Poster Presentation on "Decagonal Graceful Labeling of Some Special Graphs" in the Dr. Paarivendhar Research Colloquium (DPRC – 2024) during March 26^{th} – 28^{th}, 2024 at SRM Institute of Science and Technology, Kattankulathur.

- Presented a paper entitled "A Review of the Contemporary Approaches of Graceful Labeling", in the International Conference on Mathematical Techniques and Applications (ICMTA-2023) held from 22.03.2023 to 24.03.2023 organized by Department of Mathematics, SRMIST, Kattankulathur, Chennai.

- Presented a paper entitled "Decagonal Graceful Labeling of Some Special Graphs" in the International Conference on "Progress in Mathematics towards Industrial Applications (PMTIA-2023)" conducted at SRMIST, Ramapuram on 27.10.2023 and 28.10.2023.

- Presented a paper entitled "Z_4 Difference Cordial Labeling for Jahangir Graph" in the International Conference on "1^{st} One Day Multi-Disciplinary International Conference on Artificial Intelligence in E-Commerce (ICAIE-2022)" organized by R.B.Gothi Jain College for Women, Chennai.held on 07.12.2022 and published in the proceedings for the Multi-Disciplinary International Conference on Artificial Intelligence in E-Commerce with ISBN No. 978-93-91977-04-7.

- Presented a paper entitled "G - Dominant Singular Graph" in the International Virtual Conference on "Progress in Mathematics towards Industrial Applications (PMTIA-2022)" conducted at SRMIST, Ramapuram on 28.10.2022 and 29.10.2022.

- Presented a paper entitled "K - Even Mean Labeling in Graphs" in the "National Conference on Applied Mathematics" conducted at B.S.Abdur Rahman University, Chennai on 28.01.2010 and 29.01.2010.

- Presented a paper entitled "Even Mean Labeling for Some Fundamental Class of Graphs" in the "NATIONAL SYMPOSIUM ON MATHEMATICAL METHODS AND APPLICATIONS" held on 22^{nd} December 2009 in the Department of Mathematics, IIT Madras.

Seminars, Webinars, Workshops and Conferences Attended:

- Attended an Expert Talk on "Unlocking Insights: The Role of Statistics in Evidence-Based Decision Making" organized by the Department of Mathematics, SRM Institute of Science and Technology, Ramapuram held on 17^{th} July 2025.

- Participated in a Three-Day International Workshop (Offline Mode) on "International Workshop Graph Algorithms – 2025 (IWGA-25)" organized by Department of Mathematics, Presidency University, Bengaluru, Karnataka, India during June 26th – 28th, 2025.

- Attended an Expert Talk on "Need of Fuzzy Numbers in Grading System", organized by the Department of Mathematics, SRM Institute of Science and Technology, Ramapuram held on 13th June 2025.

- Attended an Expert Talk on "SUDOKU NUMBER OF A GRAPH", organized by the Department of Mathematics, SRM Institute of Science and Technology, Ramapuram held on 31st May 2025.

- Participated in six days Faculty Development Programme entitled, "Interdisciplinary Frontiers in Chemistry, Physics, and Mathematics: Bridging Concepts for Innovative Research and Teaching" (Online Mode) organized by Department of Chemistry, Physics and Mathematics, Noorul Islam Centre for Higher Education, Kanyakumari held from 26.05.2025 to 31.05.2025.

- Participated in the workshop on "Python Essentials for Students and Young Researchers: A Hands-on One-Day Workshop with Google Colab" held on May 18, 2025, as part of the Interdisciplinary Symposia Series 2025, organized by the MathTech Thinking Foundation, India.

- Participated in the workshop on "MATLAB Essentials: An Indispensable Tool for Students, Young Researchers, and Engineers" held on May 25, 2025, as part of the Interdisciplinary Symposia Series 2025, organized by the MathTech Thinking Foundation, India.

- Participated in Five Day National Level online Faculty Development Programme on "Applied Mathematics in Real Time Problems" organized by Department of Mathematics, Velammal College of Engineering and Technology, from 05.05.2025 to 09.05.2025.

- Attended the Seven Days National Faculty Development Program on "Advances in Nonlinear Dynamics and Applications in Engineering (ANDAE-2025)" organized by the Department of Mathematics, SRM Institute of Science and Technology, Ramapuram held from 21.04.2025 to 28.04.2025.

- Participated in the One Week Workshop on "MASTERING GRAPH THEORY WITH ADVANCED TOOLS PYTHON, SAGEMATH, MATLAB & LATEX DRAW" held from 07.04.2025 to 11.04.2025 organised by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.

- Participated in a Five-Day Virtual Faculty Development Programme on "INTERDISCIPLINARY RESEARCH COLLABORATIONS AND INNOVATIVE TEACHING METHODS FOR MATHEMATICS" organized by Department of Mathematics, in Association with IQAC and IIC, St. Joseph's College (Arts and Science), held from 17.03.2025 to 21.03.2025.

- Participated in the One Week National-Level Workshop on "SAGEMATH FOR MATHEMATICIANS: UNLOCKING ADVANCED COMPUTATION", held from 03.03.2025 to 07.03.2025 organised by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.

- Attended a 5-Day Online International Faculty Development Programme on "Recent Trends in Graph Theory" conducted by Department of Science and Humanities, DMI College of Engineering, held from 03.03.2025 to 07.03.2025.

- Attended the series of lectures, "Infinite Insights: Unveiling Mathematical Marvels" as a part of Mathematics Week "A Mathematical Tribute to Srinivasa Ramanujan" organized by the Department of Mathematics, SRM Institute of Science and Technology, Ramapuram, Chennai held from 18.12.2024 to 21.12.2024.

- Participated in Five day Faculty Development Programme on "Algebraic Structures" organized by Research Department of Mathematics, Nesamony Memorial Christian College, Marthandam held from 16.12.2024 to 20.12.2024 through virtual mode.

- Attended an International Guest Lecture on "What is Gaussianity in Non Commutative Probability? and, Why do we Care?" organized by the Department of Mathematics, SRM Institute of Science and Technology, Ramapuram, Chennai held on 29.11.2024.

- Participated in Five Day Virtual Faculty Development Programme on "Recent Frontiers in Pure & Applied Mathematics" organized by Department of Mathematics, Kongunadu Arts and Science College(Autonomous) under DBT Star College Scheme held from 11.11.2024 to 15.11.2024 through MS Teams.

- Participated in 5-Day Faculty Development Programme on "Advances in Graph Theory and Linear Algebra (AGTLA)" organized by Department of Mathematics, School of Advanced Sciences(SAS), VIT-AP University, India held from 01.10.2024 to 05.10.2024.

- Attended an expert talk on "Recent Trends in Machine Learning and its Application" organized by Department of Mathematics, SRM Institute of Science and Technology, Ramapuram, Chennai held on 28.09.2024.

- Participated in the "One-Day National Workshop on Graph Theory In Memory of Prof.E.Sampathkumar" organized by Sridharacharya Academy of Mathematical Sciences (SAAMS), Midnapore, West Bengal, India held on 22.09.2024.

- Participated in One Week Online Workshop on "Mathematics Towards Machine Learning: Unveiling The Fundamentals" held from August 26 to 31, 2024 organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore.

- Participated in the International Virtual Workshop on "The Equation of Intelligence: Exploring the Fusion of Mathematics and AI" organized by the Department of Mathematics, SRMIST, Ramapuram, Chennai held from 23.08.2024 to 24.08.2024.

- Participated in the Virtual Faculty Development Program on "Advanced Mathematical Concepts & their Real World Applications" organized by the Department of Mathematics in association with IQAC, Veltech Ranga Sanku Arts College held from 05 August 2024 to 10 August 2024.

- Participated in a 40 hours Faculty Development Programme on "Real Life Applications of AI, ML and Soft Computing Techniques" sponsored by Ministry of Electronics and Information Technology (MeitY), GoI organized by E&ICT Academy, NIT Warangal and SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, Ramapuram, Chennai during 22 nd – 31 st March, 2024.

- Participated in a 5-Day International Virtual Faculty Development Program on "Mathematics and its Application" organized by Department of Mathematics (PG), PSGR Krishnammal College for Women, Coimbatore from 11.03.2024 to 15.03.2024.

- Participated in a 5-Days Virtual Faculty Development Program on "Frontiers of Mathematics" conducted by IQAC & Department of Mathematics held from 19.02.2024 to 23.02.2024 which is organized by Sri Kanyaka Parameswari Arts and Science College for Women, Chennai.

- Participated in a 5-Day Online Faculty Development Program on "Mathematics in Engineering and Science - Importance and Applications" held at VIT-AP University, Andhra Pradesh during 02-06 January 2024 organized by the Department of Mathematics, School of Advanced Sciences.

- Participated in Two Days Online Faculty Development Programme on "MATLAB for Calculus and Linear Algebra" organized by Department of Mathematics, SRMIST, Vadapalani from 21.12.2023 to 22.12.2023.

- Participated in the One Week International Workshop on "Innovative Research in Mathematics and Computer Applications using Matlab" organized by the Department of Mathematics, Hindustan Institute of Technology and Science from 11.12.2023 and 16.12.2023.

- Attended Two days International Virtual Workshop on "Role of Mathematics in Machine Learning" organized by Department of Mathematics, SRMIST, Ramapuram on 04.09.2023 and 05.09.2023.

- Participated in Two Day Workshop on "Graph Theory with Python: A Two – Day Online Hands-On Workshop to Unlock its Power" organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore from 13.08.2023 to 14.08.2023.

- Attended Fifteen days International Virtual FDP "Frontiers of Mathematics" organized by Department of Mathematics, SRMIST, Ramapuram, in Collaboration with "1 Decembrie 1918 University" of Alba Ilulia, Romania from 05.07.2023 to 19.07.2023.

- Participated in "Two Week National Level Virtual Workshop" on "Advanced Research Methodology" conducted by Department of Commerce, Information System and Management, SRMIST, Ramapuram from 03.07.2023 to 18.07.2023.

- Attended an International FDP on "Recent Trends in Graph Theory and Mathematical Modelling and its Applications" organized by Mohamed Sathak A.J. College of Engineering from 12.06.2023 to 16.06.2023.

- Participated in FDP on "Essentials of Data Science" organized by Division of Mathematics, School of AdvancedSciences between 15^{th}-19^{th} May 2023 at VIT, Chennai.

- Attended an International Virtual Workshop on "Mathematical Modeling of OncolyticVirotherapy" organized by SRMIST, Ramapuram on 24.04.2023.

- Attended an International Virtual Webinar on "Introduction to Normed Linear Spaces" organized by SRMIST, Ramapuram on 03.04.2023.

- Participated in the one week FDP on "Recent Trends in Mathematics and its applications" organized by AICTE - Skill and Personality Development Center and Department of Mathematics at Sathyabama Institute of Science and Technology from 06.02.2023 to 11.02.2023.

- Attended three days International Virtual Workshop on "Applied Mathematics" organized by SRMIST, Ramapuram from 06.02.2023 to 08.02.2023.

- Participated in the webinar on "Basic To Advanced Latex" organized by Aalim Mohammed Salegh College of Engineering on 21.01.2023.

- Attended an Expert talk on "Number theory and its Applications" as a part of Ramanujan Day-2022, organized by the Department of Mathematics, SRMIST, Ramapuram, Chennai on 23^{rd} of December 2022.

- Participated in Two-Day online National Workshop on "Fuzzy Theory and Combinatorics" from 14.12.2022 to 15.12.2022 organized by Division of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai.

- Participated in a seven day online Faculty Development Programme on “Recent Trends in Mathematical and Statistical Tools-2022” from 24.11.2022 to 30.11.2022 organized by Department of Mathematics and Statistics CSH, SRMIST, Kattankulathur Campus,Chennai.

- Participated in the National Level Seminar on “Recent Trends in Data Analytics” from 20.10.2022 to 21.10.2022 organized by Rathinam College of Arts and Science, Coimbatore.

- Attended the Webinar on “Stochastic Models of a Call Centre” conducted by Sri Sairam Engineering College, Chennai on 30.07.2020.

- Attended the Workshop on “Graph Theory and its Applications” conducted by Madras Christian College, Chennai on 28th March 2011.

- Attended the Workshop on “Research Practices on Topics in Mathematics” conducted by Madras Christian College, Chennai from 25.06.2010 to 26.06.2010.

- Attended the One day Seminar on “Geometric Function Theory - GFT 2010” Conducted by Madras Christian College, Chennai on 30.03.2010.
- Attended the Workshop on “Theory of Computation and Graph Theory” conducted by Madras Christian College, Chennai on 27th March 2009.

Membership: IAENG Membership, Membership Number:344262.