

CURRICULUM VITAE

Dr. Mahalakshmi M.Sc., B.Ed., Ph.D.

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Google Scholar Id: <https://scholar.google.com/citations?user=8aeNq4wAAAAJ&hl=en>

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Objective

Looking forward to a dynamic environment, which will enable me to add value by optimally utilizing my Functional, Technical and Interpersonal skills for the mutual benefit of the institution to myself.

Personal Skills

Comprehensive problem solving abilities, good verbal and written communication skills, ability to deal with people diplomatically, willingness to learn, confident in achieving anything with challenging mind.

Education

DOCTOR OF PHILOSOPHY (2014 - 2018):

- Specialization : Optimization Technique
- Thesis Link : <http://hdl.handle.net/10603/277909>
- Under the Guidance : Prof. R Murugesan
Department of Mathematics
REVA University
Bangalore: 560064.

BACHELOR OF EDUCATION (2011 - 2012):

- Subject : B.Ed. (Mathematics & Physics)
- Institution : R.R College of Education, Bangalore.
- Affiliated To : Bangalore University.
- Percentage : 72%

MASTER OF SCIENCE (2009 - 2011):

- Subject : M.Sc. (Mathematics)
- Institution : M.E.S College of Arts, Science & Commerce.
- Affiliated To : Bangalore University.
- Percentage : 83.2%

BACHELOR DEGREE (2006 - 2009):

- Subject : B.Sc. (Physics, Chemistry, Math's).
- Institution : V.V.Puram Science College.
- Affiliated To : Bangalore University, Bangalore.
- Percentage : 72%

Research Field

- Optimization Techniques
- Mathematical models and its application in Agricultural and Biological field.

M.Sc Project guided

1. **Title:** New And Old Book Purchase System Web Application Using Fast Api
Year:2022-23
2. **Title:** Application of EDA and Linear Regression for District Wise Dynamic Ground Water Resource Management in Karnataka, India
Year:2022-23
3. **Title:** Study on waste management using mathematical and statistical operation
Year:2022-23

Teaching Experience

- Working as an Assistant Professor at **REVA University** from September 2018 till date.
- Worked as Visiting faculty in **M.S. Engineering College** from September 2017 to August 2018.
- Worked as Visiting Faculty in **Dayanand Sagar College** from January 2016 to May 2017
- Worked as Visiting Faculty in **V.V. Puram Science College** From February 2015 to December 2015
- Worked as Assistant Professor in **Brindavan College of Engineering** from September 2012 till November 2014
- Worked as Guest lecturer in **Deeksha PU College** from June 2011 to May 2012.

Conferences and Seminars attended

- One day Seminar on “Theories in Mathematics” held on 3rd February 2011 at the M.E.S College of Arts, Commerce & Science, Bangalore
- “10th ANNUAL CONFERENCE OF ADMA & GRAPH THEORY DAY” HELD FROM 10th to 13th, June 2014 at REVA Institute of Technology & Management, Bangalore
- One day National Seminar on “Cyber Security” held on 3rd February 2016 at Dayanand Sagar College of Arts, Science and Commerce, Bangalore
- One day Webinar on “MATHEMATICAL MODELING IN BIOLOGICAL NETWORKS” organised by Department of Mathematics with Computer Applications, SRI MALOLAN COLLEGE OF ARTS AND SCIENCE, Chengalpet, Tamilnadu held on 18th June 2020.
- One day Webinar on “Basic Author Workshop Research Article Writing & Reference Management Using Mendeley” on Monday, 22nd June 2020 organized by the Faculty of Science, Annamalai University in collaboration with ELSEVIER.
- One day Webinar on “Introduction to SCI Lab” held on 26th June 2020, Organized by the Department of Mathematics, AMET University, Chennai.
- Four days National Webinar on “Fluid Mechanics and its applications in Engineering Science” from 24th to 27th June organized by Department of Mathematics, PES Institute of Technology and Management, Shivamogga, Karnataka.

- International Conference on “New Computer Science and Engineering Trends NCSET2020” on 1st and 2nd July 2020 organized by World Advance Sciences, Saudi Arabia.

Workshops

- Two day Workshop on “MISSION 10X FACULTY WORKSHOP” held from 27th to 29th January 2014 at Brindavan College of Engineering, Bangalore
- Two day Workshop on “Mathematics Practicals using FOSS” held on 22nd and 23rd of July 2016 at Jnanajyothi Auditorium, Central College, Bangalore University, Bengaluru
- Two day Workshop on “R- Programming held on 11th and 12th December 2017 at REVA University, Bengaluru.
- One day Workshop on “Mathematics and its applications” held on 11th march 2020 at NMKRV College for Women, Bengaluru
- One day National Workshop on “Python for Beginners” held on 27th June 2020 organized by Government First Grade College, KGF, Kolar.
- Three days online Hands on Workshop on “Sagemath” from 1st to 3rd July 2020 organized by Department of Mathmatics, Bangalore Institute of Technology, Bengaluru
- One day online Workshop on “Prerana Pravaha” on 5th September 2020 organized by Cambridge Institute of Technology, Bengaluru
- Three days Workshop on “INTRODUCTION TO MATHEMATICAL ANALYSIS AND APPLICATIONS” from 6 to 8th April 2021 organized by M. E. S. College of Arts, Commerce and Science, Bengaluru
- One week International Workshop on “Research Paradigms” from 3rd to 8th May 2021 organized by Research and Development cell, St. Francis college, koramangala, Bengaluru
- Five days Workshop on “Hands on Python Programming” from 17rd to 21st May 2021 organized by Department of Mathematics, REVA University , Bengaluru

FDP

- Five day FDP on “Research and its Implications for the Advancement of Science:An Interdisciplinary Approach” held from 22nd to 26th July 2019 at REVA University, Bengaluru.
- One week(7 days) International FDP on “Avant-garde Trends in Mathematics” held from 17th to 23rd June 2020 organized by Bannari Amman Institute of Technology , Erode, Tamilnadu (Online)

- One week(5 days) Online National FDP on “ICT tools for Online teaching and Assessment” from 23rd to 27th June 2020 organized by Research Culture Society and Sanskar B.Ed college, Godhra,Gujarath.
- Completed ten days Faculty Development Programme on Python 3.4.3 organized by REVA University, Bangalore with course material provided by Spoken Tutorial Project, IIT Bombay on 28th September 2020.
- One week(5 days) Online FDP on “Roles of Mathematics in Academic Research and Technology” from 13th to 17th July 2020 organized by Department of Mathematics, VEMANA IT , Bengaluru..
- Two week Online FDP on “Outcome Based Education” from 27th July 2020 to 8th August 2020 organized by IQAC, REVA University , Bengaluru..
- Five days FDP on “Matlab Software” from 17th August 2020 to 20th August 2020 organized by Department of Mathematics, REVA University , Bengaluru..
- Five days FDP on “Applications of Fluid Dynamics and Advanced Materials” from 24th August 2020 to 28th August 2020 organized by Bheemanna Khandre Institute Of Technology, Bhalki ..
- Five days FDP on “Applications of R Programming in Statistics” from 12th October 2020 to 16th October 2020 organized by Department of Mathematics, REVA University , Bengaluru.
- Five days FDP on “Computational Biology” from 1-5 February 2021 organized by School of Computer Science and Engineering, REVA University, Bengaluru.
- One week International FDP on “Demystifying Optimization Techniques” held from 22nd to 27th March 2021 organized by Bannari Amman Institute of Technology , Sathyamangalam, Tamilnadu
- Six days FDP on “PYTHON PROGRAMMING” from 19-24th July 2021 organized by Bengaluru North University and Mathematics Forum (BNU,BU,BCU), Bengaluru.
- Fifteen days International FDP on “Frontiers of Mathematics” from 19th May to 2nd June 2022 organized by the Department of Mathematics, SRMIST, Ramapuram, Chennai, India in association with “1Decembrie 1918 University” of Alba Iulia, Romania.

Papers presented in Conferences

- Presented the paper “Mathematical Optimization Algorithm for Minimizing the Cost Function of GHG emission in AS/RS Using Positive Selection Based Clonal Selection Principle” in “National conference on Mathematical Techniques and Applications 2018” held on 5th and 6th January 2018

- Presented the poster on “Minimizing the Cost Function of GHG emission in AS/RS Using Artificial Immune System Algorithm” in “10th Annual Conference of Karnataka Science and Technology Academy” held on 18th and 19th January 2018
- Presented the paper “Mathematical Optimization for Multi Objective Flexible Employee Scheduling Using Artificial Immune System Algorithm” in the “International Conference on Emerging Trends in Science and Technologies for Engineering Systems” held on 11th and 12th January 2018
- Presented the paper “Effectiveness of multi skill training program in the manufacturing process” in “National conference on Mathematical Techniques and Applications 2019” held on 11th and 12th January 2019
- Presented the paper “Minimizing the GHG of AGV using ROA” in “International conference on Recent Advances in Applied Sciences(ICRAAS-2019)” held on 17th and 18th October 2019
- Presented the paper “Cost Reduction in the Manufacturing Process by Multiskill Training using Genetic Algorithm” in “International Conference on Recent Trends in Applied and Computational Mathematics (ICRTACM-2020)” held on 4th and 5th of December 2020
- Presented the paper “A Survey on Mathematical Modeling in Agriculture” in “International Conference on Recent Trends in Applied and Computational Mathematics (ICRTACM-2020)” held on 4th and 5th of December 2020.
- Presented the paper “Effectiveness of Multi Skill Training Program in the Manufacturing Process Using Hybrid Genetic Algorithm” in “International Conference on Recent Trends in Applied and Computational Mathematics (ICRTACM-2021)” held on 8th and 9th of October 2021
- Presented the paper “Minimizing the Cost Function of GHG in AS/RS Using Hybrid Genetic Algorithm” in “International Conference on Recent Trends in Applied and Computational Mathematics (ICRTACM-2021)” held on 8th and 9th of October 2021
- Presented the paper “Efficient Authenticated Key Establishment Protocol for Telecare Medicine Information Systems” in “International Conference on Recent Trends in Applied and Computational Mathematics (ICRTACM-2022)” held on 10th and 11th of October 2022

Papers published

- 1) ¹Mahalakshmi and ²Murugesan R, “Optimization Algorithm for Minimizing the Earliness/Tardiness of Automated Guided Vehicles Using Artificial Immune

- System”, *International Journal of Applied Engineering Research*, ISSN 0973-4562 Volume 12, Number 22 (2017) pp. 11913-11919 (Scopus Indexed Journal)
- 2) ¹**Mahalakshmi** and ²Murugesan R, ”Flexible Employee Scheduling with Multi Skill Training Program using Genetic Algorithm”, *International Journal for Research in Engineering Application and Management*, ISSN : 2454-9150 Vol-03, Issue-09, Dec 2017(UGC Approved Journal)
 - 3) ¹**Mahalakshmi** and ²Murugesan R, “Mathematical Optimization for Multi Objective Flexible Employee Scheduling Using Artificial Immune System Algorithm”, *Journal of Advanced Research in Dynamical and Control Systems* ISSN : 1943-023X, Vol. 10, 01 – Special issue, 2018 (Scopus Indexed Journal)
 - 4) ¹**Mahalakshmi** and ²Murugesan R, “Mathematical Optimization Algorithm for Minimizing the Cost Function of GHG emission in AS/RS Using Positive Selection Based Clonal Selection Principle” *Journal of Physics: Conference Series*, 1000 (2018)012092, ISSN : 1742-6596 (Scopus Indexed Journal)
 - 5) ¹**Mahalakshmi** and ²Murugesan R, “Minimizing the Cost Function of GHG emission in AS/RS Using Artificial Immune System Algorithm” *International Journal for Research in Engineering Application and Management*, ISSN : ISSN : 2454-9150 Vol-05, Issue-02, May 2019(UGC Approved Journal)
 - 6) ¹**Mahalakshmi** and ²Murugesan R, “Effectiveness of multi skill training program in the manufacturing process” *AIP Conference Proceedings*, ISSN : 1551-7616, June 2019(Scopus Indexed Journal)
 - 7) ¹**Mahalakshmi**, ²Ranjini K S and ³Murugesan R, “Cost Reduction in the manufacturing process by multi skill training using PSBCSP algorithm” *International Journal of Mechanical and Production Engineering Research and Development* with ISSN(P):2249-6890 ; ISSN(E):2249-8001, Vol-10, Issue-03, June 2020(Scopus Indexed Journal)- Q3 rated Journal
 - 8) ¹**Mahalakshmi**, ²Swathi Pai M and ³Murugesan R, “Diminishing the Earliness and Tardiness of AGV using PSBCSP algorithm” *International Journal of Mechanical and Production Engineering Research and Development* with ISSN(P):2249-6890 ; ISSN(E):2249-8001, Vol-10, Issue-03, June 2020(Scopus Indexed Journal) - Q3 rated Journal
 - 9) ¹**Mahalakshmi**, ²Murugesan R and ³Ranjini K S, “Multi Objective Flexible Employee Scheduling using PSBCSP algorithm” *Journal of Emerging Technologies and Innovative Resesarch* with ISSN(P):2349-5162, Vol-07, Issue-09, September 2020(UGC approved Journal)

- 10) ¹**Mahalakshmi**, ²Narayana Gowda N, ³Madhusudhan Zalki and ⁴Nitya S, “Cost Reduction In The Manufacturing Process By Multiskill Training Using Genetic Algorithm” *Elementary education Online* with ISSN(P): 1305-3515, Vol-20, Issue-04, January 2021 Scopus Indexed Journal) – Q4 rated Journal
- 11) M. Kaviyarasu, M.Rajeshwari, **Mahalakshmi**, M.V Chakradhara Rao, “Limited Condition for Device that Perform Bipolar Fuzzy” *Mathematical Statistician and Engineering Application* with ISSN: 2094-0343, 2326-9865, Vol-71, Issue-04, August 2022 Scopus Indexed Journal)
- 12) **Mahalakshmi**, Srinivasa G, M.Rajeshwari, Noor Jahan, “Effectiveness of Multi Skill Training Program in the Manufacturing Process Using Hybrid Genetic Algorithm” *Specialusis Ugdymas* with ISSN: 1392-5369, Vol-2, Issue-43, September 2022 Scopus Indexed Journal) – Q4 rated Journal
- 13) **Mahalakshmi**, Srinivasa G, Nidhi S Vaishnav, “Multi Objective Flexible Employee Scheduling for Pharmaceutical Industries Using Hybrid Genetic Algorithm”, *Journal of Pharmaceutical Negative Results*” with ISSN: 0976-9234, Vol-13 , Issue-4, October 2022
- 14) **Mahalakshmi**, R Lokesh Kumar, K S Ranjini, S Sindhu and R Udhayakumar, “Efficient Authenticated Key Establishment Protocol for Telecare Medicine Information Systems”, *AIP Conference Proceedings*, ISSN : 1551-7616, October 2022(Scopus Indexed Journal)
- 15) N Sri Ranjani and **Mahalakshmi**, “ An Overview On Diabetes Mellitus: Mathematical Approach”, *Journal of Pharmaceutical Negative Results*” with ISSN: 0976-9234, Vol-13 , Issue-6, November 2022
- 16) Srinivasa G, **Mahalakshmi**, Anil R Sedamkar, Manjunatha, “DOUBLE OUTER INDEPENDENT EDGE DOMINATION IN GRAPHS” *Journal of Pharmaceutical Negative Results*” with ISSN: 0976-9234, Vol-13, Issue-9, December 2022
- 17) Gayathri K. S, M.Rajeshwari, **Mahalakshmi** , “Group Actions of wreath product S_n on permutation groups”, *Scandinavian Journal of Information Systems*, with ISSN: 1901-0990, Vol-35, Issue-01, April 2023, Scopus Indexed Journal – Q4 rated Journal
- 18) **Mahalakshmi**, Noor Jahan, Nidhi S Vaishnav, “An Over View on Mathematical Modeling in Agriculture”, *European Chemical Bulletin*, with ISSN: 2063-5346, Vol-12, Issue-09, August 2023, Scopus Indexed Journal – Q3 rated Journal

Patent published

- Mahalakshmi and Rose Bindu Joseph, “DESIGN OF SMART HEALTHCARE MODEL FOR MEDICAL IMAGE ANALYZING USING DEEP LEARNING”, The Patent Office Journal No. 31/2021 Dated 30/07/2021

Project

- ❖ **Principal Investigator:** Dr. Mahalakshmi
Title: Multiplicating Earthworm in Agricultural Process
Budget: 9.24 Lakhs
Status: Submitted (Under review)

Achievements

- The best teacher in making awards from Ace Creative Learning’s (DEEKSHA) in 2011
- The paper “Mathematical Optimization for Multi Objective Flexible Employee Scheduling Using Artificial Immune System Algorithm” was awarded as “**BEST PAPER AWARD**” in the “International Conference on Emerging Trends in Science and Technologies for Engineering Systems” held on 11th and 12th January 2018.

Computer Skills

Basic computer knowledge : Windows, MS-Office
Languages Known : C Language, Sci lab, Maxima, Mat Lab and Python

Others

- ❖ Worked as a part of NAAC Accreditation
- ❖ Worked as a part of NBA Accreditation
- ❖ Worked as a part of ARIIA and NIRF Accreditation

Personal Profile

Name : Dr. Mahalakshmi
Date of Birth : 08.02.1988

Sex : Female.

Marital Status : Married.

Nationality : Indian.

Languages Known : English, Hindi, Kannada, Tamil and Telugu.

Interests : Reading, Music and Dance.

Present Address : Dr. **MAHALAKSHMI**
W/o Krishnan C
#294, Ambedkar Nagar,
Banashankari II Stage,
Bengaluru - 560070.
Karnataka.

Permanent Address : Dr. **MAHALAKSHMI**
W/o Krishnan C
#546, Mannambatti Village,
Boothamangalam Post,
Tiruvannamalai District,
Tamil Nadu

DECLARATION: I hereby affirm that the information furnished above is true to the best of my knowledge.

Date:

Place: Bangalore

(Dr. Mahalakshmi)