

## CURRICULUM VITAE

### M.THIAGARAJAN

Head & Associate Professor ,  
PG and Research Department of Mathematics,  
St.Joseph's College(Autonomous), Tiruchirappalli, Tamil Nadu, India – 620 002.

Phone : 9486705696 , 6374512267

e-mail: [thiagarajan\\_ma1@mail.sjctni.edu](mailto:thiagarajan_ma1@mail.sjctni.edu) , [mathsthiags@yahoo.co.in](mailto:mathsthiags@yahoo.co.in)

### EDUCATION

- 2008 Ph.D. Mathematics, Bharathidasan University, Tamil Nadu, India  
(Dissertation Title : “A study on various queueing models with controllable arrival rates having interdependent inter-arrival and service times”).
- 1993 M.Phil. Mathematics, Bharathidasan University, Tamil Nadu, India.
- 1991 M.Sc. Applied Mathematics, H.H.The Raja's College, Bharathidasan University, Tamil Nadu, India.
- 1989 B.Sc. Mathematics, Bishop Heber College, Bharathidasan University , Tamil Nadu, India.

### EMPLOYMENT

Department of Mathematics, St. Joseph's College (Autonomous),  
Tiruchirappalli, Tamil Nadu, India. December 1999 – present.

### RESEARCH INTERESTS

## Stochastic models in Queueing theory

### EXPERIENCE

Teaching: 25 years

Research: 21 years

### PUBLICATIONS OF RESEARCH PAPERS

1. S. Nivetha Therasal, M. Thiagarajan (2024) Poisson Input and Exponential Service Time Population Interdependent Queuing Model Having Parallel Servers with Breakdown and Controllable Arrival Rates. Springer Proceedings in Mathematics & Statistics.
2. K.H. Rahim, M. Thiagarajan (2024) M/M(a,b)/2/K Controlled Arrival Rates and Independent Queuing Model. Springer Proceedings in Mathematics & Statistics.
3. Bebitovimalan A, Thiagarajan M. (2024) A Finite Capacity Finite Source Single Server Markovian Queueing System With Discouraged Arrivals Retention Of Reneged Customers And Controllable Arrival Rates With Feedback. Indian Journal Of Science And Technology. 17(33): 3456-3466.
4. Bebitovimalan A, Thiagarajan M. (2024) An Infinite Capacity Single Server Markovian Queueing System With Discouraged Arrivals Retention Of Reneged Customers And Controllable Arrival Rates With Feedback. Indian Journal Of Science And Technology. 17(30):3100-3108.
5. Therasal SN, Thiagarajan M. (2024) Poisson Input And Exponential Service Time Finite Capacity Interdependent Queueing Model With Breakdown And Controllable Arrival Rates. Indian Journal Of Science And Technology. 17(12): 1167-1179.
6. Subhapriya SP, Thiagarajan M. (2024) M/M/1 Interdependent Queuing Model With Vacation And Controllable Arrival Rates. Indian Journal Of Science And Technology. 17(14): 1497-1506.
7. Subhapriya, S. P., & Thiagarajan, M. (2024). M/M/1/K Loss And Delay

Interdependent Queueing Model With Vacation And Controllable Arrival Rates. *IJST*, 17, 1691.

8. Rahim, K. H., & Thiagarajan, M. M. (2023). M (A, B)/1 Model Of Interdependent Queueing With Controllable Arrival Rates. *Indian Journal Of Science And Technology*, 16(37), 3100-3109.
9. S P, Subhapriya & Thiagarajan, M. (2022). M/M/1/K Interdependent Queueing Model With Vacation And Controllable Arrival Rates.
10. Queueing Theory Based On Decentralized Onload Data Arrival Using Expected Max-Min Probabilistic Decision For Workload. *Multidisciplinary Review Journal / 7 / 107-110 / 2394-5125* (2020)
11. Michael, A. A., & Thiagarajan, M. (2020). A Virtualized Target Queueing Balanced Model Using  $V_{max}/M/G$ -Load (Min)/Cache- $P2\lambda_m$  For Reducing Queueing Time Expectation Of Customer Delay Tolerance. *Journal Of Computational And Theoretical Nanoscience*, 17(12), 5520-5527.
12. Michael, A. A., & Thiagarajan, M. Virtualized Stochastic Multi Queueing Model Based On  $V_{max}/M/G$ -Min/I-Cache- $P\lambda_m$  For Reducing Customer Idle Time Expectation On Single Server Utilization.
13. Michael, A. A., & Thiagarajan, M. (2020). A Virtualized Target Queueing Balanced Model Using  $V_{max}/M/G$ -Load (Min)/Cache- $P2\lambda_m$  For Reducing Queueing Time Expectation Of Customer Delay Tolerance. *Journal Of Computational And Theoretical Nanoscience*, 17(12), 5520-5527.
14. Muthukumaran, S., Thiagarajan, M., & Kalidass, K. Analysis Of Faster And Slower Arrivals Of M/M/1/N Vacation Queue With A Waiting Server.
15. Performance Analysis Of A Single Server Finite Capacity Markovian Vacation Queue With Two Types Of Arrivals. *IJAEMA JOURNAL / 11 / 0 / 0886-9367* (2019).
16. Muthukumaran, S., Thiagarajan, M., & Kalidass, K. (2019). A Finite Capacity Markovian Queueing System With Catastrophic Effects And Bernoulli Feedbacks. *International Journal Of Computational Engineering Research*

(IJCER), 9(05), 01-11.

17. "A Multi Server Markovian Queuing System With Discouraged Arrivals Retention Of Reneged Customers", Controllable Arrival Rates, Loss And Delay And No Passing, International Journal Recent Scientific Research, Vol 8, Issue 3, 2017 (With S.Premalatha).
18. "M/M/C/K/N Interdependent Retrial Queuing Model With Controllable Arrival Rates", Global Journal Of Applied Mathematics, Vol13, Number1,2017(With B.Antline Nisha).
19. "The M/M/C/N/K Interdependent Queuing Model With Controllable Arrival Rate And Reverse Balking", International Journal Of Innovative Research In Science, Engineering And Technology, Vol 5, Issue 5, 2016(With S. Sasikala).
20. "The M/M/1/N Interdependent Queuing Model With Controllable Arrival Rate, Reverse Balking And Reverse Reneging", International Journal Of Innovative Research And Development, Vol 5, Issue 4, 2016(With S. Sasikala).
21. "The M/M/C/N Interdependent Queuing Model With Controllable Arrival Rate And Reverse Balking", Asian Journal Of Current Engineering And Maths,2016 (With S. Sasikala).
22. "The M/M/1/N Interdependent Queuing Model With Controllable Arrival Rate And Reverse Balking", International Journal Of Current Research, Vol 8, Issue01, 2016 (With S. Sasikala).
23. "A Single Server Markovian Feedback Queuing System With Discouraged Arrivals Retention Of Reneged Customers And Controllable Arrival Rates", International Journal Of Advanced Scientific And Technical Research, Vol 2, Issue 6, 2016 (With S.Premalatha).
24. "A Single Server Markovian Queuing System With Discouraged Arrivals Retention Of Reneged Customers And Controllable Arrival Rates", International Journal Of Mathematical Archive - 7(2),2016 (With S.Premalatha).
25. "A Finite Capacity Loss And Delay Interdependent Retrial Model With Controllable Arrival Rates And No Passing", International Journal Of Computational Sciences

And Mathematics, Vol 7, Number 1, 2015(With B. Antline Nisha).

26. "A Finite Capacity Multiserver Interdependent Queuing Model With Controllable Arrival Rates", Applied Mathematical Sciences, Vol9, 2015(With B. Antline Nisha).
27. "The M/M/1/K/N Interdependent Retrial Queuing Model With Controllable Arrival Rates", International Journal Of Mathematical Sciences And Engineering Applications, Vol 8, 2014(With B. Antline Nisha).
28. "The M/M/1/K/N Interdependent Retrial Queuing Model With Impatient Customers And Controllable Arrival Rates";, International Journal Of Applied Research, Vol 3, 2014(With B. Antline Nisha).
29. "The M/M/1/K Interdependent Retrial Queuing Model With Controllable Arrival Rates", International Journal Of Mathematical Sciences And Engineering Application, Vol 8, 2014 (With , B. Antline Nisha And A. Srinivasan).
30. M/M/C/K Loss And Delay Interdependent Queueing Model With Controllable Arrival Rates And No Passing , Sankhya Series B (2012) , Vol.71, Part 1 , Springer. (With A. Srinivasan).
31. Thiagarajan, M., & Srinivasan, A. (2011). M/M/C/K Loss And Delay Interdependent Queueing Model With Controllable Arrival Rates And No Passing. *Sankhya B*, 73, 316-330.
32. "A Finite Population Loss And Delay Queueing System With Interdependent Inter-Arrival And Service Times, Controllable Arrival Rates And No Passing", Journal Of Applied Statistical Science (2009), Vol.17, No.1, Pp47-64 (With A. Srinivasan).
33. "Geo /Geo /C / $\infty$  Interdependent Queueing Model With Controllable Arrival Rates", Proceedings Of The National Conference On Mathematical And Computational Models (2008), Narosa Publishing House, New Delhi, Pp 113- 122 ( With A. Srinivasan).
34. "Busy Period Analysis Of M/M/1/ Interdependent Queueing Model With Controllable Arrival Rates", Acta Ciencia Indica, (2007), Vol. XXXIIM, No.1, Pp.19-24 (With A. Srinivasan).
35. "M / M /C/ K /N Interdependent Queueing Model With Controllable Arrival Rates

*Bulking ,Reneging And Spares", Journal Of Statistics And Applications, (2007) Vol.2, Nos.1-2 ,Pp56-65 (With A.Srinivasan ).*

36. "A Finite Capacity Multiserver Poisson Input Queue With Interdependent Inter-Arrival And Service Times And Controllable Arrival Rates", Bulletin Of Calcutta Mathematical Society, (2007) Vol.99 , No.2 ,Pp153-162 (With A.Srinivasan).
37. " $M_{[X]} / M / 1 \square$  Interdependent Queueing Model With Controllable Arrival Rates," Journal Of Decision And Mathematical Sciences ,(2006) Vol .11, No. 1-3, Pp 7-24 (With A.Srinivasan ).
38. " $M / M / 1 / K$  Interdependent Queueing Model With Controllable Arrival Rates", International Journal Of Management And Systems , (2006) Vol.22, No.1,Pp 23-34 (With A.Srinivasan ).

## REFEREING

- Refereed - 1 Research Paper for Publication in the Journal of **OPSEARCH** – A National Journal published by Operational Research Society of India.
- Refereed – 2 Research Paper for Publication in Journal of Science and Technology (Web of Science) 2024.

## Research Project

*Minor Research Project : A STUDY ON VARIOUS INTERDEPENDENTQUEUEING MODELS WITH CONTROLLABLE ARRIVAL RATES. Reference :*  
MRP- 693/05(UGC-SERO) Link No. 1693.0, dated February 2005.  
Grant approved : Rs. 40,000

## GUIDANCE

**Students completed Ph.D - 4**

**Student submitted Ph.D thesis – 1**

**Students are doing Ph.D. – 6**

## CONFERENCES / COURSES ATTENDED

- February 2012 delivered a lecture on “Stochastic Models in Queueing Theory” in the Mathematics Association, Department of Mathematics, Holy Cross College, Trichy
- 28<sup>th</sup> January 2012, delivered a lecture on “Stochastic Models in Queueing Theory” in the Mathematics Association, Department of Mathematics, Chidambarambillai College for Women, Mannachanallur, , Trichy.
- 10<sup>th</sup> - 30<sup>th</sup> November 2010, UGC Academic Staff College, Bharathidasan University, Tamil Nadu, India -participated in the Refresher Course on Mathematics.
- 13<sup>th</sup> October 2009, delivered a special lecture on “ Stochastic models in queueingtheory” in the Mathematics Association, Department of Mathematics, National College, Trichy.
- 13<sup>th</sup> -15<sup>th</sup> December 2007, National Conference on Mathematical and Computational Models (NCMCM 2007), PSG College of Technology, Coimbatore, Tamil Nadu, India – participated and presented a research paper entitled “*Geo/Geo/c Interdependent Queueing model with controllable arrival rates*”.
- 6<sup>th</sup> - 8<sup>th</sup> January 2007, International Conference –CMASM 2007-FIM XIV- Computational, Mathematical and Statistical Methods, Indian Institute of Technology Madras, Tamil Nadu, India – participated and presented a research paper entitled “*Geo/Geo/1 Interdependent Queueing model with controllable arrivalrates*”.

- 1<sup>st</sup> – 21<sup>st</sup> June 2006 , UGC Academic Staff College, Bharathidasan University, Tamil Nadu, India -participated in the Refresher Course on Educational Technology.
- 15<sup>th</sup> – 17<sup>th</sup> December 2005, National Conference on Applied Stochastic Processes, Presidency College, Chennai, Tamil Nadu, India- participated and presented a research paper entitled "*M/M/C/K/N Interdependent Queueing model with controllable arrival rates, balking ,reneging and spares*".
- 2<sup>nd</sup> – 3<sup>rd</sup> December 2004, National Seminar on Recent Developments in Applied Mathematics, St. Joseph's College, Tiruchirappalli, Tamil Nadu, India-participated.
- 8<sup>th</sup> – 9<sup>th</sup> September 2004, State level Seminar on Mathematical Methods in Social Sciences, Jamal Mohammed College, Tiruchirappalli, Tamil Nadu, India-participated and presented a research paper entitled "*M<sub>[x]</sub>/M/1 Interdependent Queueing model with controllable arrival rates*".
- 4<sup>th</sup> – 5<sup>th</sup> September 2004, State level Seminar on Decision making Techniques, A.V.V.M Sri Pushpam College, Poondi, Tamil Nadu, India- participated and presented a research paper entitled "*M/M/C/K Interdependent Queueing model with controllable arrival rates*".
- 19<sup>th</sup> February – 18<sup>th</sup> March 2003, Orientation Course, UGC Academic Staff College, Pondicherry University, India – attended.
- 20<sup>th</sup> – 21<sup>st</sup> December 2001, State level Seminar on Discrete Mathematics, H.H.TheRajah's College, Tamil Nadu, India- participated.

- 13<sup>th</sup> February – 14<sup>th</sup> February, International Conference on Mathematical Methods and Computation, Jamal Mohamed College (Autonomous), Trichy, India- Chairperson
- 2<sup>nd</sup> March and 3<sup>rd</sup> March 2018, National Conference on Recent Trends in Applied Mathematics, Bishop Heber College(Autonomous), Trichy, India – Chairperson

**Seminars (S) / Conferences (C) /Workshops (WS) attended and the source of funding (National (N) / International (IN)) with details of outstanding participants, if any**

<b>Title</b>	<b>Organization Name</b>	<b>Place</b>	<b>Days</b>	<b>From Date</b>	<b>To Date</b>
National Colloquium on Autonomous Institution marching towards university status	St. Joseph`s College	Trichy	2	2019-03-04	2019-03-05
FDP in Mathematics	Department of Mathematics, St. Joseph`s College, Trichy	Trichy	1	2023-03-11	2023-03-11
Orientation Programme for the Teaching Faculty	St. Joseph`s College, Trichy	-	2	2023-06-15	2023-06-16

**Resource Person: (Special Lectures / Workshops / Seminars /Association Activities/ Alumni Meeting)**

<b>Type of Programme</b>	<b>Title</b>	<b>Beneficiaries</b>	<b>Days</b>	<b>Date</b>
--------------------------	--------------	----------------------	-------------	-------------

INTERNATIONAL CONFERENCE	VIRTUAL HEBER INTERNATIONAL CONFERENCE ON APPLIED MATHEMATICS 2020	DEPARTMENT OF MATHEMATICS, BISHOP HEBER COLLGE	1	2020-11-07
INTERNATIONAL CONFERENCE	APPLIED MATHEMATICS ANDBIO INSPIRED COMPUTATIONS	RESEARCH SCHOLARS	1	2019-01-11
ASSOCIATION MEETING	STOCHASTIC PROCESSES	U.G STUDENTS, DEPT OF MATHS, ST.JOSEPH'S COLLEGE	1	2014-09-04
ASSOCIATION MEETING	STOCHASTIC PROCESSES	P.G STUDENTS, DEPT OF MATHS, CAUVERY COLLEGE	1	2014-08-11

#### Ph. D Awarded to

Scholar Code	Scholar Name	Date of ViVa	Title
34157/PhD/Maths/FT/ jan2012	B ANTLINE NISHA	2017	A Study On Various Retrial Queueing Models With Controllable Arrival Rates Having Interdependent Interval
24694-Ph.D-MAT	S. SASIKALA	2018	A Study On Various Interdependent Queueing Models With Reverse Balking Reverse Reneging And Controllable Arrival Rates
16541-Ph.D-MAT	S. PREMALATHA	2019	A Study On Various Independent Interarrival And Service Times Queueing Models With Discouraged Arrivals

34137/PH.D/K1/MAT/	S MUTHUKUMARAN	2020	A Study On Various State Dependent Faster And Slower Arrivals Of Markovian Queueing Models With Cat
--------------------	----------------	------	--

**M.Phil Awarded to**

Scholar Code	Scholar Name	Date of ViVa	Title
18MMA107	JENIFA J	2019	Stochastic Process With Queueing Models
18MMA115	DEVIKA D	2019	Stochastic Process With Queueing Models
18MMA120	JENIFER NIVETHA J	2019	Stochastic Process With Queueing Models
18MMA126	AMALA SRICHARD	2019	Stochastic Process With Queueing Models
19MMA012	A AKASH MARIAN	2020	A Study On M/M/1 Queueing Withworking Vacation
20MMA101	LOURDU BONICIA U	2021	Analysis Of Queueing Models Inoperations Research
21MMA101	Keerthiga Joel G	2022	A Case Study On M/M/1/Infinity Queueing Model

**Academic Member**

Body Name	Position	Period
Board Of Studies, Bishop Heber College Trichy	Member	2021-2022
Board Of Studies, Bishop Heber College, Trichy	Member	2021-2022
Holy Cross College, Trichy	Screening -cum-Evaluation Committee For CAS	12.02.2022
Holy Cross College, Trichy	Subject Expert Member For screening-cum-Evaluation committee	2022-2023
Holy Cross College, Trichy	Evaluation And Screening	2023

	Process Of the Career Advancement Scheme	
Jamal Mohamed College, Trichy	Member Of Selection Committee	30-10-2023
Urumu Dhanalakshmi College	External Subject Expert	17.05.2023
Urumu Dhalakshmi College, Tiruchirappalli - 620019	Subject Expert For CAS	2023-2024
Jamal Mohamed College, Tiruchirappalli - 620020	Subject Expert For Appointment selection	2023-2024
Holy Cross College, Tiruchirappalli - 620 002	Subject Expert For CAS	30.01.2024

\*\*\*\*\*