Curriculum Vitae

Brief Profile:



R. Gowthami was born in Puducherry, INDIA. She received her M.Sc. in Mathematics from Pondicherry University in 2017. She received her Ph.D. in Mathematics from Pondicherry University in 2021. Her area of research include classical/retrial queueing models and phase type queueing models with MAP arrival. She has published 8 articles in reputed journals. She has presented papers in 8 International/National Conferences. She has worked as a Temporary Faculty in the department of Mathematics, NIT Tiruchirappalli from August 2021 to July 2022. From September 2022 to till date, she has been working as an Assistant Professor in the department of Mathematics, NIT Tiruchirappalli.

Google Scholar: https://scholar.google.com/citations?user=JX3NNf0AAAAJ&hl=en&oi=sra

Scopus: https://www.scopus.com/authid/detail.uri?authorId=57211802300

ORCiD: https://orcid.org/my-orcid?orcid=0000-0002-6868-0124

ResearchGate: https://www.researchgate.net/profile/Gowthami Ranganathan

1. Name: Dr. R. GOWTHAMI

2. Designation: Assistant Professor-Grade II

3. Office Address: Department of Mathematics, NIT Tiruchirappalli

4. Telephone (Direct) (Optional): NIL

Telephone: Extn (Optional):

Mobile (Optional):

5. Email (Primary):gowthami@nitt.edu Email (Secondary) :gowthami9424@gmail.com

6. Field(s) of Specialization:

Stochastic Processes-Queueing Theory

7. Employment Profile

| Job Title | Employer | From | То |
|---------------------|------------------------|-------------|-----------|
| Assistant Professor | NIT Tiruchirappalli | 23.09.2022 | Present |
| Temporary Faculty | NIT Tiruchirappalli | August 2021 | July 2022 |

8. Academic Qualifications (From Highest Degree to High School):

| Examination | Board / University | Year | Division/ Grade | Subjects |
|-------------|---------------------------------|------|--------------------|---|
| Ph.D. | Pondicherry University | 2021 | NA | Mathematics |
| M.Sc. | Pondicherry University | 2017 | I | Mathematics |
| B.Ed. | Pondicherry University | 2015 | I | Mathematics |
| B.Sc. | Pondicherry University | 2014 | I | Mathematics |
| HSC | State board of Tamil Nadu | 2011 | I | Mathematics, Physics, Chemistry, Biology |
| SSLC | State board of Tamil Nadu | 2009 | I | General |

9. Academic/Administrative Responsibilities within the University

| Position | Faculty/Department/Centre/Institution | From | То |
|----------|---------------------------------------|------|----|
| - | - | - | - |

10. Academic/Administrative Responsibilities outside the University

| Position | Institution | From | То |
|----------|-------------|------|----|
| - | - | - | 1 |

11. Awards, Associateships etc.

| Year of Award | Name of the Award | Awarding Organization |
|---------------|----------------------------|------------------------------|
| 2017 | Gold Medal | KMCPGS(Autonomous), |
| | | Affiliated to Pondicherry |
| | | University |
| 2014 | Gold Medal | BGCW(Autonomous), Affiliated |
| | | to Pondicherry University |
| 2009 | State Third in SSLC Public | Government of Puducherry |
| | Examination | |

12. Fellowships

| Year of Award | Name of the Fellowship | Awarding | From | To |
|---------------|------------------------|--------------|--------------|--------------|
| | _ | Organization | (Month/Year) | (Month/Year) |
| 2018 | NFOBC | UGC | APR 2018 | NOV 2021 |
| 2011 | INSPIRE SCHOLARSHIP | DST | 2011 | 2014 |

13. Details of Academic Work

- (i) Curriculum Development NIL
- (ii) Courses taught at Postgraduate and Undergraduate levels

UG:

- 1. MAIR44 Partial Differential Equations ad Numerical Methods
- 2. MAIR21 Complex Analysis and Differential Equations
- 3. MAIR22 Complex Analysis and Differential Equations

PG:

- 1. MA601 Numerical Methods and Applied Statistics
- 2. MA602 Applied Mathematics
- 3. MA623 Applied Mathematics
- 4. MA712 Statistical Computing Lab
- (iii)Projects guided at Postgraduate level NIL
- (iv)Other contribution(s) NIL

14. Details of Major R&D Projects

| Title of Ducient | Eunding Aganov | Dura | ation | Status |
|------------------|---------------------------------|------|-------|--------------------|
| Title of Project | Title of Project Funding Agency | | To | Ongoing/ Completed |
| - | - | - | ı | - |

15. Number of PhDs guided

| Name of the PhD | Title of PhD | Role(Supervisor/ Co- | Year of |
|-----------------|--------------|----------------------|---------|
| Scholar | Thesis | Supervisor) | Award |
| - | - | - | - |

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

| Date (s) | Title of Activity | Level of Event | Role (Participant/ | Event Organized by | Venue |
|----------------|----------------------------|-------------------|--------------------|---------------------|---------------------|
| | | (International/ | Speaker/ | | |
| | | National/ | Chairperson, | | |
| | | Local) | Paper | | |
| | | | presenter, | | |
| January 7- | International | International | Any other) | CMS College, | CMS College, |
| 10, 2019 | Conference on | International | Paper presenter | Kottayam, Kerala | Kottayam, Kerala |
| 10, 2017 | Advances in | | presenter | Kottayam, Keraia | Kottayam, Keraia |
| | Applied | | | | |
| | Probability and | | | | |
| | Stochastic | | | | |
| | Processes (In | | | | |
| | Honour of Prof. | | | | |
| | A. | | | | |
| | Krishnamoorthy) | | | | |
| August 1- | 34th Annual | International | Paper | Pondicherry | Pondicherry |
| 3, 2019 | Conference of | | presenter | University, | University, |
| | the Ramanujan Mathematical | | | Puducherry | Puducherry |
| | Society (RMS) | | | | |
| December | International | International | Paper | Department of | Department of |
| 28-30, | Conference and | international | presenter | Mathematics, | Mathematics, |
| 2019 | 22nd Annual | | F | BITS Pilani – | BITS Pilani – |
| | Convention of | | | Pilani Campus, | Pilani Campus, |
| | Vijnana Parishad | | | India | India |
| | of India on | | | | |
| | Advances in | | | | |
| | Operations | | | | |
| | Research, | | | | |
| | Statistics and | | | | |
| | Mathematics | | | | |
| 21st, | (AOSM 2019) International | International | Paper | Department of | Department of |
| 21st, 22nd, | Virtual | memanona | presenter | Statistics, | Statistics, |
| 28th & | Conference on | | Probelitor | Ramanujan School | Ramanujan School |
| 29th | Prof. C. R. Rao's | | | of Mathematical | of Mathematical |
| November | School of | | | Sciences, | Sciences, |
| 2020 | Thought on | | | Pondicherry | Pondicherry |
| | Statistical | | | University(A | University(A |
| | Sciences- | | | Central University) | Central University) |
| | 2020(ICON- | | | & Department of | & Department of |
| | CRRAO- | | | Mathematics & | Mathematics & |

| December 17-20, Conference of 17-20, Indian Conference of Indian Mathematical Society-IMS 2020(An online conference) 21st-22 nd International December 2020 Mathematical Sciences and Computational Intelligence International International Paper presenter Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Vellore, India Vellor | | STOSS-2020) | | | Statistics, Mrs. A.V.N. College(Almamater of Prof. CR RAO), Visakhapatnam, India | Statistics, Mrs. A.V.N. College(Almamater of Prof. CR RAO), Visakhapatnam, India |
|--|-----------------------|---------------------------|---------------|-----------|---|--|
| Indian Mathematical Society-IMS 2020(An online conference) Mathematical Sciences Vellore Institute of Technology, Vellore, India Vellore, I | | | International | - | 1 | 1 |
| Mathematical Society-IMS 2020(An online conference) | , | | | presenter | * | , and the second |
| Society-IMS 2020(An online conference) 21st-22 nd International 21st-22 nd Conference on December 2020 Mathematical Sciences and Computational Intelligence February 25-26, 2021 March 24- 26, 2021 Sociences, Vellore Institute of Technology, Vellore, India Sciences, Vellore Institute of Technology, Vellore, India School of Mathematics, Shri Mathematics, Shri Mata Vaishno Devi University, Katra, Jammu and Kashmir, India Kashmir, India February 25-26, Conference March 24- 26, 2021 Sociences, Vellore Institute of Technology, Vellore, India Paper Pondicherry Pondicherry Pondicherry University (A Central University of India), India Of India), India Paper Ramanujan Institute for Advanced Study in Advanced Study in | 2020 | | | | | |
| 2020(An online conference) | | | | | | |
| Conference Con | | _ | | | , | ′ |
| Vellore, India Vellore, India Vellore, India | | , | | | | |
| International International Paper School of Mathematics, Shri Mata Vaishno Devi University, Katra, University, Katra, Jammu and Kashmir, India Kashmir, India International Paper Pondicherry Pondicherry Pondicherry University (A Universi | | comerence | | | C , | . |
| December Conference on Mathematics, Shri | 21st-22 nd | International | International | Paper | · · · · · · · · · · · · · · · · · · · | · |
| Sciences and Computational Intelligence International Paper Pondicherry Conference Pondicherry (An online conference) March 24- 24th Ramanujan Symposium-National Sciences and Intelligence International Paper Paper Paper Pondicherry (An online conference) Paper Pondicherry (An Central University (An Online Conference) Paper Pa | December | Conference on | | - | Mathematics, Shri | Mathematics, Shri |
| Computational Intelligence Jammu and Kashmir, India February International Conference Pondicherry Pondicherry Pondicherry Pondicherry (A Central University (A Central University (A Central University of India), India March 24- 24 th Ramanujan National Paper Pondicherry University of India), India Symposium-National Paper Pondicherry Pondicherry University (A Central University of India), India Ramanujan Ramanujan Institute for Institute for Advanced Study in Advanced Study in | 2020 | Mathematical | | | Mata Vaishno Devi | Mata Vaishno Devi |
| February International International Paper Pondicherry University (A University of India), India March 24- 24 th Ramanujan National Paper Paper Paper Of India), India Symposium-National Paper Presenter Pondicherry University (A Central University of India), India Paper Ramanujan Ramanujan Institute for Advanced Study in Advanced Study in Paper Advanced Study in Paper | | Sciences and | | | University, Katra, | University, Katra, |
| February International Conference Conference PMAACM2021 (An online conference) March 24- 24th Ramanujan Symposium-National Symposium-National Ramanujan International Paper Pondicherry University (A University (A Central University of India), India of India), India Ramanujan Ramanujan Institute for Advanced Study in Advanced Study in | | Computational | | | Jammu and | Jammu and |
| 25-26, Conference FMAACM2021 (An online conference) March 24- 24 th Ramanujan National Paper presenter (An online conference) March 24- Symposium-National Paper presenter (National) Symposium-National Paper presenter (An online conference) Ramanujan Ramanujan Institute for Advanced Study in Advanced Study in Advanced Study in | | Intelligence | | | Kashmir, India | Kashmir, India |
| 2021 FMAACM2021 (An online conference) March 24- 24 th Ramanujan National Paper presenter Symposium-National National Central University of India), India Ramanujan Ramanujan Institute for Advanced Study in Advanced Study in | - | | International | - | | |
| (An online conference) March 24- 26, 2021 Symposium- National (An online conference) Paper Ramanujan Institute for Advanced Study in Advanced Study in | · · | | | presenter | _ · | ` |
| Conference) March 24- 24 th Ramanujan National Paper Ramanujan Symposium- National Paper Institute for Institute for Advanced Study in | 2021 | | | | • | • |
| March 24- 24 th Ramanujan National Paper Ramanujan Ramanujan Symposium- National Paper presenter Institute for Advanced Study in Advanced Study in | | ` | | | of India), India | of India), India |
| 26, 2021 Symposium- National presenter Institute for Advanced Study in Advanced Study in | 3.5 1.04 | / | NT . 1 | D | D : | D : |
| National Advanced Study in Advanced Study in | | | National | - | | ž . |
| | 20, 2021 | · - | | presenter | | |
| | | National Conference on | | | Mathematics, | Mathematics, |
| Stochastic University of University of | | | | | · · · · · · · · · · · · · · · · · · · | · · |
| Modeling and Madras, Chennai, Madras, Chennai, | | | | | • | _ |
| Computational India India | | _ | | | | , , , , , , , , , , , , , , , , , , , |
| Techniques India | | _ | | | | |

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

| Title of Activity | Level of Event | Date (s) | Role | Venue |
|-------------------|------------------|----------|------|-------|
| | (International/ | | | |
| | National/ Local) | | | |
| - | - | _ | - | - |

18. Invited Talks delivered

| Topic | Date | Inviting Organization |
|-------|------|-----------------------|
| - | - | - |

19. Membership of Learned Societies

| Type of Membership (Ordinary | Organization | Membership No. with |
|--------------------------------|--------------|---------------------|
| Member/ Honorary Member / Life | | date |
| Member) | | |
| - | - | - |

20. Academic Foreign Visits

| Country | Duration of Visit | Programme |
|---------|-------------------|-----------|
| - | - | - |

21. Publications

(A) Refereed Research Journals:

| Author(s) | Title of Paper | Journal | Volume (No.) | Page numbers | Year | Impact Factor of |
|--------------|---|-------------------------------|--------------|--------------|------|---------------------|
| | | | , | | | the Journal |
| | | | | | | (Optional) |
| G. | Analysis of | Reliability: | 14 | 2(53) | 2019 | |
| Ayyappan, R. | MAP/PH/1 retrial queue with constant | Theory and Applications | | | | |
| Gowthami | retrial rate, | Applications | | | | |
| Gowtham | Bernoulli schedule | | | | | |
| | vacation, Bernoulli | | | | | |
| | feedback, | | | | | |
| | breakdown and | | | | | |
| C | repair | T . T A 1 | 7 | 150 | 2010 | |
| G. | Analysis of MAP/PH(1),PH(2)/2 | Int. J. Appl. Comput. Math | 5 | 159 | 2019 | |
| Ayyappan, R. | Queue with | Comput. Main | | | | |
| Gowthami | Bernoulli Schedule | | | | | |
| | Vacation, Bernoulli | | | | | |
| | Feedback and | | | | | |
| | Renege of | | | | | |
| | Customers | ~ ~ | | | | |
| G. | Analysis of | Soft | 25 | 15 | 2020 | |
| Ayyappan, R. | MAP,PH ^{OA} ₂ /PH ^I ₁ ,PH ^O ₂ /1 retrial | Computing | | | | |
| Gowthami | queueing system | | | | | |
| O Williams | with two way | | | | | |
| | communication, | | | | | |
| | vacation, feedback | | | | | |
| | and impatient | | | | | |
| | customers | | | | | |

| C | A1: C | T4 4' 1 | 12 | 2 | 2021 |
|-----------------------------------|---|---|----|-------|------|
| G. Ayyappan, R. Gowthami | Analysis of MAP/PH/1 retrial queue with constant retrial rate, working vacations, abandonment, flush out, search of customers, breakdown and repair | International Journal of Operational Research, Inderscience Publishers | 42 | 3 | 2021 |
| G. Ayyappan, R. Gowthami | A MAP/PH/1 queue with Setup time, Bernoulli vacation, Reneging, Balking, Bernoulli feedback, Breakdown and repair | Reliability: Theory and Applications | 16 | 2(62) | 2021 |
| G. Ayyappan, R. Gowthami | A MAP/PH/1 queue with Setup time, Bernoulli schedule vacation, Balking and Bernoulli feedback | Int. J. Appl. Comput. Math | 8 | 2 | 2022 |
| G. Ayyappan, R. Gowthami | A MAP/PH1, PH2/1 system with two types of heterogeneous service, setup, closedown, vacation, immediate feedback, breakdown and repair | International Journal of Mathematics in Operational Research | 22 | 3 | 2022 |
| G. Ayyappan, R. Gowthami | Analysis of MAP/PH1, PH2/2 Queue with Working Breakdown, Starting Failure, and Bernoulli Vacation | In Book: S. R. Kannan et al. (eds.), Fuzzy Mathematical Analysis and Advances in Computational Mathematics, Studies in Fuzziness and Soft Computing 419 | | | 2022 |

(B) Conferences/Workshops/Symposia Proceedings

| Author(s) | Title of Abstract/ Paper | Title of the Proceedings | Page numbers | Conference Theme | Venue | Year |
|-----------|--------------------------|--------------------------|-----------------|---------------------|-------|------|
| - | - | - | - | - | - | - |

(C) Books & Monographs

| Author(s) | Title of Book/Monograph | Name of Publishers | Year of Publication | ISSN/ISBN Number |
|-----------|-------------------------|-----------------------|------------------------|---------------------|
| - | - | - | - | - |