



**S.S.Meyvizhi**

PhD, Statistics

University of Glasgow

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Course	Institution	Year	CGPA
PhD Statistics	University of Glasgow	2024	-
B.Sc. Mathematics & Statistics	Mount Carmel College Autonomous	2021-24	9.1
AISSCE -Highschool Diploma	HAL Public School	2019-21	10

## ACADEMIC EXPERIENCE

- **Co-Organiser | R-Ladies, Bangalore Chapter** [Feb'23- Present]
  - As a diversity initiative, the mission of R-Ladies is to achieve proportionate representation by encouraging, inspiring, and empowering people of genders currently underrepresented in the R community.
  - Focused on educational content via posters, tweets, and infographics in R for the Bangalore Chapter.
  - Developing workshops and talks for diverse audiences by R experts in a wide range of domains.
- **Reading Project | Indian Institute for Science (IISc), India** [May'24- July'24]
  - Reading Project on Markov Chains- Discrete, Continuous time and MCMC.
  - Briefly covered mixing and coupling times of Markov Chains and Poisson Processes
- **INSPIRE SHE Scholar** [June'21- June'24]
  - Annual grant awarded by the Department of Science & Technology, Government of India
  - Awarded to undergraduate students pursuing natural sciences in India securing top 1% ranks in high school examinations
  - Additional annual summer grant for research opportunities hosted at any accepting lab or research institution in India.
- **Research Intern | IIT Hyderabad, India** [May'23- Sept'23]
  - Stipend-based Summer Research Internship in Spatio-Temporal Modelling
  - 12 weeks hybrid internship
- **Teaching Assistant | International Center for Theoretical Sciences** [May 23-June 23]
  - One of the 5 TAs for the Summer School for Women in Mathematics & Statistics
  - Maintained  $\text{\LaTeX}$  solutions of assignments on a daily basis
  - Daily grading of assignments for two weeks along with assisting with explanations in classes.

## PROJECTS

- **Reading Project | Dr Manjunath Krishnapur** [May'24- July'24]
  - Simulated different distributions, sampling techniques, and a few Markov chain-motivated examples.
  - Engaged in weekly discussions over material read in Markov Chains, Poisson processes and MCMC techniques.
  - Preliminary reading on coupling in Markov chains and Measure theory.
  - References- Pierre Bremaud, Sheldon Ross
- **Spatio- Temporal Modelling of Covid-19 in Mumbai | Dr Sayantee Jana** [May'23- Sept'23]
  - Literature review on various Bayesian methods used and the algorithms used to implement them in R
  - Exploratory Data Analysis & assessed effects of Covid-19 on minorities and slums status to make Spatio-Temporal models
  - Analysed temporal trends for future outbreak prediction & dealt with computational techniques to approach high dimensional data
  - Continued with a reading project on Gaussian Markov Random Fields, Matern Covariance and INLA
- **Shakti Scheme- A commuter-centric feasibility study | Prof Ambika** [Sep'23-Jan'24]
  - Sample Survey project on Shakti Scheme, a free bus ride scheme for women implemented in Karnataka, India
  - Performed primary data collection to address social factors including demographic, commute distance, change in waiting time and resources available (amongst others).
  - Implemented non-parametric testing among other techniques to aid policy-making-driven conclusions.

- **Ambulance Routing Problem- An Optimisation case study in CBD, Bangalore** [Nov'23-Dec'23]
  - Taking Central Business District, Bangalore as a bellwether, we perform comparative analysis for the Ambulance Routing Problem via metaheuristics- Genetic Algorithms and Ant Colony Optimisation techniques
  - Compared efficiency and computation times of the two methods via simulation
- **Start Up Culture in Bangalore** [Dec'22- Feb'23]
  - Exploratory Data Analysis on secondary data of Start Up ecosystem in India
  - Variables analysed and reported on- Investments, Sectors and Regional factors

## CONFERENCES

- **Young Statisticians Meeting (YSM)** | University of Liverpool, [July'25]  
Poster presentation on Disease Risk Mapping with Discontinuities.
- **Women in Data Science (WiDS) Edinburgh** | The National Robotarium, [May'25]  
Awarded Best Poster, for Disease Risk Mapping to a data-science themed conference.
- **Science Undergraduate Research Conference (SURC)** | Azim Premji University [Dec'23]  
One among 150 other selected teams for Poster presentation on 'Perspectives on the Ambulance Routing Problem'
- **Moderator, Panel Discussion** | IDWSDS Conference [Oct'23]  
Co-moderated a panel talk including professionals from academic, industry and government each at the global virtual conference.
- **Departmental presentations** | IIT, Hyderabad [Sept'23]  
Presented to an audience of faculty and graduate students on 'Spatio-temporal modelling of Covid-19 in Mumbai' offline

## COURSES & WORKSHOPS

- **INLA: past, present, and future** | University of Glasgow, [May'25]  
A workshop in honour of Håvard Rue's 60th birthday, reviewing the latest developments in INLA, its current challenges and future directions through case studies and hands-on training with practical tutorials on related R software.
- **Dynamics of Biological Systems** | International Centre for Theoretical Sciences [June'24- July'24]  
Two-part course dealing with Non-Linear Dynamics in Ecology & Low-Reynolds Numbers Modelling in microscopic scales
- **Fascinating World of Flows** | International Centre for Theoretical Sciences [Jun'23- July'23]  
Covered Fluid dynamics and the world of fluids over 12 classes.
- **Martingales on Discrete Probability** | Chennai Mathematical Institute [Jan'23]  
2-day workshop on introducing Martingales and their role in probability
- **International Indian Statistical Association Annual Conference** | IISc, Bangalore [Dec'23]  
Student attendee of the week-long conference
- **Follow up Winter School** | Indian Women and Mathematics & IISER-T [Dec'23]  
Selective rigorous Winter school covering Real Analysis, Linear algebra and Number Theory
- **Summer School for Women in Mathematics & Statistics** | International Centre for Theoretical Sciences [Jun'22]  
Selective 2 week summer school introducing students to Linear Algebra, Logic, Real Analysis, Statistics and R

## SKILLS & TOOLS

**Programming Languages:** Python (basic) , R (Intermediate)

**Tools & Libraries:** MATLAB, R-INLA, matplotlib, geostatsp, parallel,  $\LaTeX$

## AFFILIATIONS

- Caucus for Women in Statistics and Data Science (CWS)
- International Indian Statistical Association (IISA)
- Royal Statistical Society (RSS)
- London Mathematical Society (LMS)
- Women in Data Science (WiDS)

## LEADERSHIP

- **Club Head, Math Association**  
Organised outreach events and workshops with a 20+ members core team for events with 400+ footfall. Developed crucial leadership and time management skills.

- **Vice President Public Relations for MCC Toastmasters Club**

Organised college events as part of the Executive committee to promote public speaking and professional networking with community, college and corporate clubs.

- **Ideation Core Team, ANOVation Club**

Conceptualised events and reported on events from the student-run Statistics association.

- **Co-Organiser, R-Ladies Bangalore Chapter**

#### EXTRACURRICULARS

- 3MT 2025- Three minute Thesis University Finalist
- Sr. Juanita Prize for Academically Bright Science Student- 2024, Mount Carmel College Autonomous
- Pathways Mentor, and Triple Crown Holder in Toastmasters International.