

AG MNC 2025 REPORT

ALL GIRLS MATH NURTURE CAMP 2025



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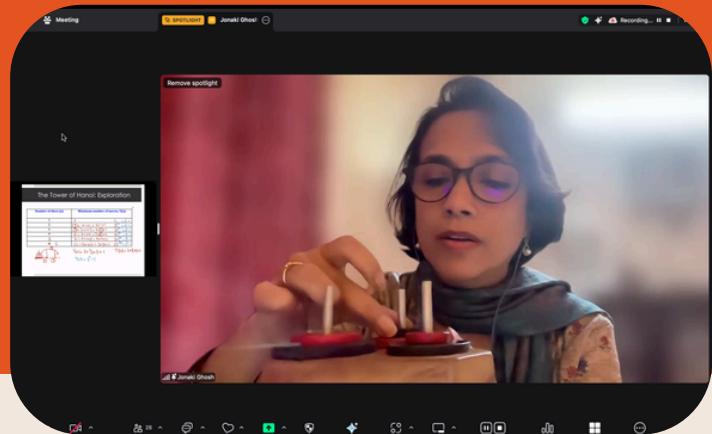
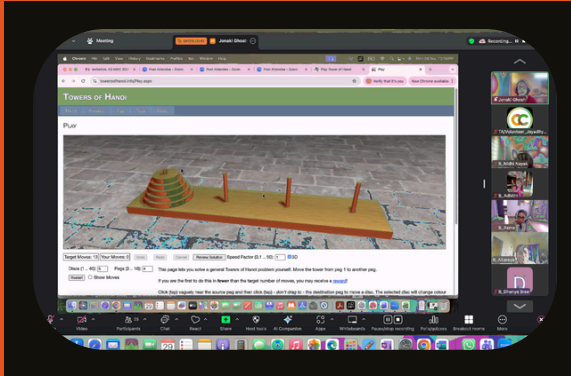
ORGANIZERS



Raising A Mathematician (RAM) Foundation is a not-for-profit organization dedicated to promoting mathematics education across India through innovative and impactful initiatives. Its flagship program, the Raising A Mathematician Training Program (RAM TP), is a residential mathematics camp designed to expose students to diverse areas of pure and applied mathematics. RAM also organizes annual camps like Epsilon India, RAM TP, Math.Biz and AG MNC, each tailored to introduce participants to specialized mathematical concepts and real-world applications. Through these initiatives, the Foundation fosters a love for mathematics and inspires students to think critically and creatively.

In addition to its camps, RAM provides year-round Mathematics and Informatics Olympiad Training Programs, preparing students for prestigious competitions such as the International Mathematical Olympiad and the Indian Computing Olympiad. The foundation is also committed to inclusivity, exemplified by its Maths Circle for non-English medium students in suburban Mumbai the first of its kind in India. The foundation also runs Maths Circle in other parts of the country i.e. in Delhi, Chennai (Chapter 1 - OMR Area and Chapter 2 - Krea University, Admin Office, Alwarpet) Nagpur, Nashik and Bangaluru). These Maths Circles encourage collaboration and exploration among students traditionally underserved in STEM education. Through its wide array of programs, RAM has become a cornerstone in nurturing mathematical talent and building a nationwide vibrant community of learners.

DETAILED REPORT



OBJECTIVE

Inspire young girls aged 12 to 15 who are passionate about mathematics by introducing them to the beauty of pure and applied math. Spark their curiosity through engaging opportunities to learn from accomplished Women Mathematicians and Scientists, igniting their journey into a world of limitless possibilities.

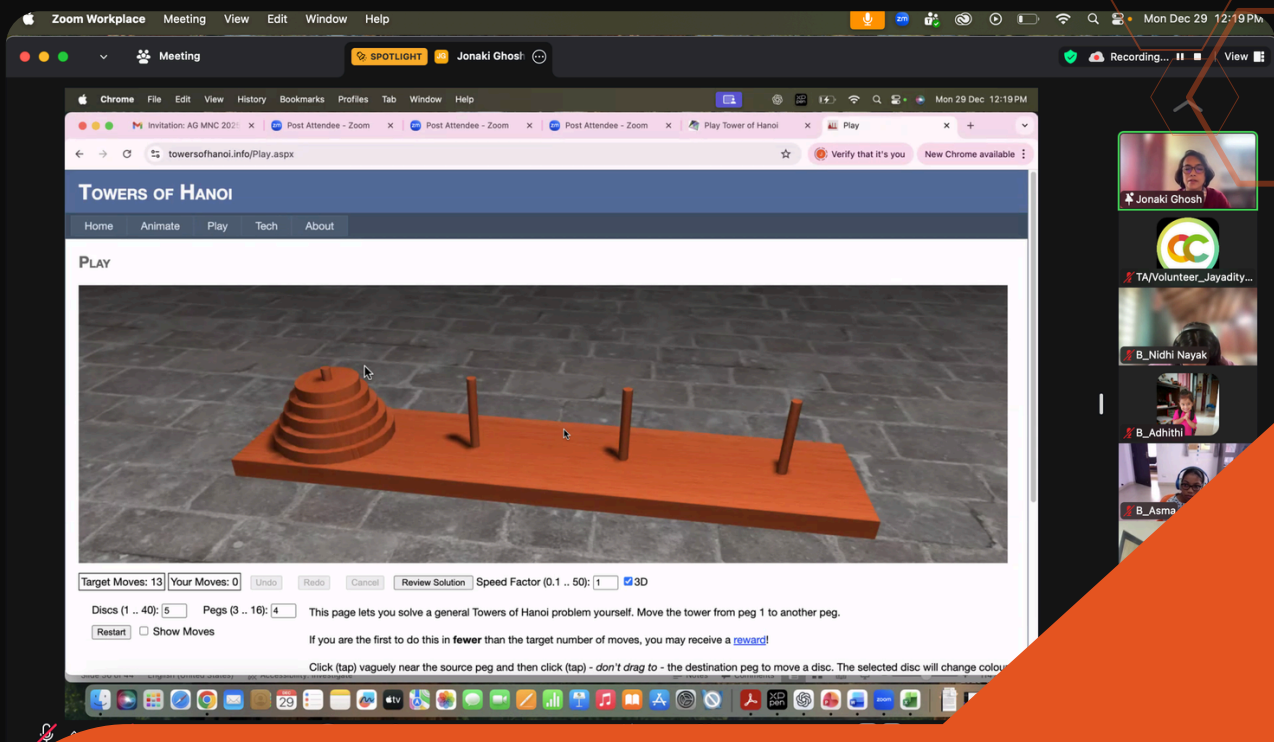


KEY HIGHLIGHTS



Participants outside country - Dubai and Singapore

Pedagogy and Program Schedule



The timetable for AG MNC 2025 was thoughtfully designed, balancing formal learning, interactive engagement, doubt-clearing spaces, and recreational activities. Across the programme, 52 formal sessions were planned, with 26 sessions each for Batch A and Batch B. Each session was scheduled for 90 minutes, allowing sufficient time for discussion, exploration, and meaningful interaction. On most full working days, participants had four major academic session slots, amounting to nearly 6 hours of structured learning per day for each batch. Since the camp was conducted online, adequate breaks were built into the schedule to reduce screen fatigue and support children's safety and well-being. Overall, the timetable reflected a careful balance of academic rigor, reflection, and participant care.

Speakers



Ms. Elena Gribelyuk

Ms. Elena is a PhD student in Computer Science at Princeton University. She taught probability (random variables, expectation, variance, and concentration bounds).



Dr. Tulsi Srinivasan

Dr. Tulsi is a faculty member at Azim Premji University. She taught continued fractions.



Ms. Paroma Roy Chowdhury

Ms. Paroma is a PhD researcher in Economics at Princeton University. She gave an introduction to game theory to the students.

Speakers



Dr. Shantha Bhushan

Dr. Shantha is a faculty member at Azim Premji University. She taught decorating square grids, games people play, and square grids and knots.



Dr. Jayasree

Dr. Jayasree is an Educational Outreach Officer at IIT Palakkad. She taught taxicab geometry and recreational mathematics.



Dr. Jonaki Ghosh

Dr. Jonaki is a Professor at Lady Shri Ram College, University of Delhi. She introduced the Tower of Hanoi and explored mathematics through problem solving.

Speakers



Dr. Kavita Sutar

Dr. Kavita is a mathematics and data science educator and consultant. She taught two-view geometry and the perception of depth.



Ms. Swati Sircar

Ms. Swati is a consultant with Azim Premji University. She taught quadrilaterals (from triangles to classification of ignored quadrilaterals).



Ms. Sruthi Subramanian

Ms. Sruthi is an undergraduate student at IIT Kanpur. She taught consumer theory to students.

Speakers



Ms. Sae Patil

Ms. Sae is a student and faculty member at Raising A Mathematician Foundation. She taught sequences and surprises.



Dr. Sneha Chaubey

Dr. Sneha is an Associate Professor at IIT Delhi. She taught introduction to modular arithmetic.



Mr. Vinay Nair

Mr. Vinay is a co-founder of Raising A Mathematician Foundation. He taught methods of proof.

Speakers



Dr. Krishna S.

Dr. Krishna S. is a computer science and engineering professor at IIT Bombay. In post-camp sessions, she introduced students to games on graphs.



Dr. Reshma Menon

Dr. Reshma Menon is an applied mathematics assistant teaching professor and mathematics education researcher at the University of California, Merced. In post camp sessions, she taught probability and its applications in the real world.



Dr. Gangotryi Sorcar

Dr. Gangotryi is an assistant professor and humanities and social sciences researcher at Krea University. In post-camp sessions, she taught three dimensional polyhedra and Euler's formula.

Speakers



Dr. Prajakta Nimbhorkar

Dr. Prajakta is an associate professor and theoretical computer science researcher at the Chennai Mathematical Institute.



Dr. Deborah Kent

Dr. Kent is a history of mathematics professor and researcher at the University of St Andrews. Through a post-camp session, she gives students a glimpse into game theory.



Mr. Jayaditya Gupta

Mr. Jayaditya Gupta is a high school mathematics researcher and competitive math enthusiast. He introduced students to LaTeX.

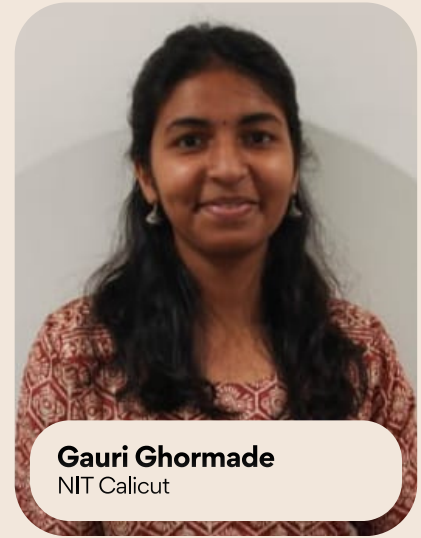
TAs & Volunteers



Monika Mahaldar
B.Sc., B.Ed Mathematics
Graduate



Maaya Kashyap
Azim Premji University



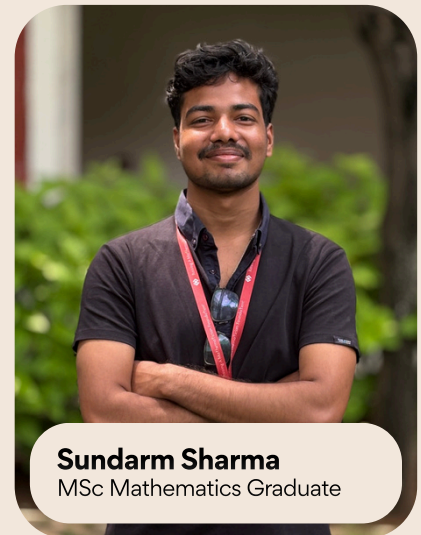
Gauri Ghormade
NIT Calicut



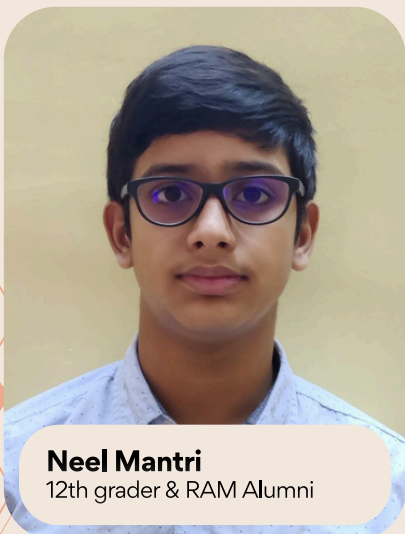
Lakshmi
Chinmaya Vishwa Vidyapeeth



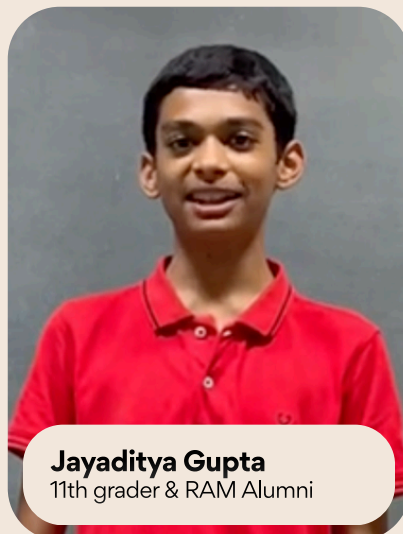
Bhavanesh
IIT Kanpur



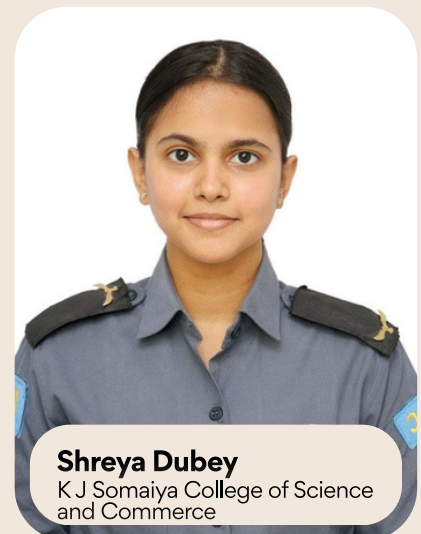
Sundarm Sharma
MSc Mathematics Graduate



Neel Mantri
12th grader & RAM Alumni



Jayaditya Gupta
11th grader & RAM Alumni

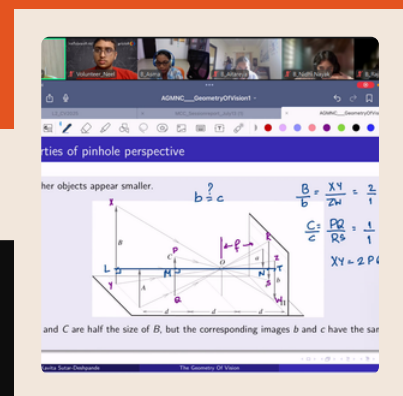
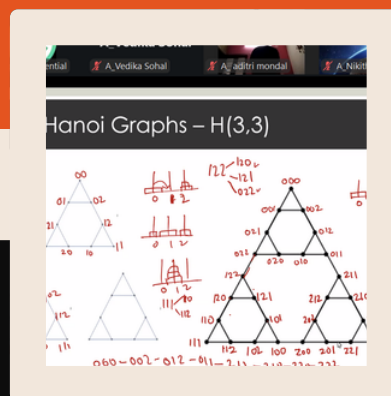


Shreya Dubey
K J Somaiya College of Science
and Commerce

Outcome

The AG MNC 2025 program provided students an opportunity to explore mathematics beyond the school curriculum through an online learning environment. The sessions introduced diverse areas such as proof techniques, probability, game theory, geometry, and number theory, helping students see mathematics as interconnected and meaningful. The online format enabled participation from students across different regions, creating a diverse learning community.

As an all-girls initiative, the program aimed to create an encouraging and inclusive space where girls could actively engage with mathematics, build confidence, and connect with peers who shared similar interests. Through interactive discussions, problem-solving, and multiple representations, students engaged deeply with concepts, and learned to justify their ideas in a supportive environment.



Regular engagement, collaborative tasks, and guided exploration fostered curiosity, confidence, and independent thinking. Overall, the program helped students build a richer understanding of mathematics and encouraged them to view it as a creative, collaborative, and exploratory discipline.

AG MNC Post Camp Online Sessions

The AG MNC Post Camp online sessions offered students a diverse and engaging exploration of mathematical ideas through interactive lectures. The program began with an introduction to games on graphs, helping students understand strategy and structure in network-based settings. This was followed by a series of sessions on probability and its real-world applications, where concepts such as randomness, likelihood, and decision-making were explored in practical contexts. The course then moved into geometry, focusing on three-dimensional polyhedra and Euler's formula, connecting visual intuition with mathematical reasoning. Later sessions introduced deeper problem-solving perspectives and advanced thinking approaches through guided discussions. A highlight of the program was an introduction to game theory, which examined fairness and strategic choices through relatable scenarios. The series concluded with a session on typesetting mathematics effectively, equipping students with essential skills to present mathematical ideas clearly and professionally.

