

WORKSHOP ON LOGIC AND AUTOMATA

Cultivating the Roots of Computing

June 01-05, 2026

Organized by

Department of Information Technology

Indian Institute of Engineering Science and Technology, Shibpur

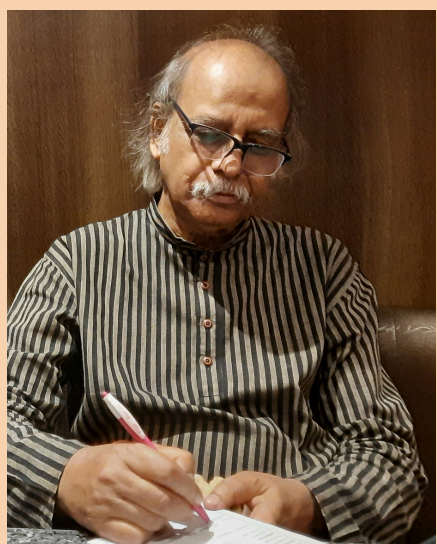
OBJECTIVE

- To bring together faculty members, researchers and graduate students working at the intersection of automata theory, formal logic, and their applications
- Focus on the foundational concepts of formal logic and automata theory, emphasising on cultivating the roots of computing
- To create interests among the young minds to work on foundational aspects of computer science
- To play as an advanced guide for the participants to explore the theory and applications of automata theory and logic and open up more research options for them

KEY TOPICS

- **Fundamentals of Logic: *Understanding the Background of Computing***
- **Expedition to the Roots of Computing**
 - Hilbert's programme
 - Gödel's incompleteness theorem
 - Church Turing Thesis
- **Algebraic Logic and its implications**
- **Interplay between logic and automata**
- **Cellular Automata: *Natural Model of Computation***
 - Parallel Map
 - Game of Life
 - Non-uniform Cellular Automata
- **In-Memory Computing: *A landmark development for high-performance computing***
- **Hands-on Training**

SPEAKERS



Prof. Mihir K Chakraborty



Prof. R. Ramanujam



Prof. Biplab K Sikdar



Dr. Sukanta Das



Dr. Jayanta Sen

Who Can Apply?

- Graduate/Undergraduate students
- PhD Scholars/ Researchers/Faculty Members

Registration Fees:

- 4,000/- (for regular participants)
- 2,500/- (for UG/PG students)



Registration link:

<https://forms.gle/sAZT7guLVrpGRgaA8>



Registration Deadline:

25-05-2026



REGISTRATION FORM

Colocated with **Indian Summer School on Cellular Automata 2026**

For more details, visit

<https://school.cellularautomata.in/2026/>

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