PMRF-ISSS Teaching Programme

Prime Minister Research Fellowship students' teaching requirement facilitated by the Institute of Smart Structures and Systems

Module PMRF-ISSS105/2025

Topics in Geometric Algorithms

Name of the PMRF student

Siddhartha Sarkar

Required background of the students taught

Prerequisite: A first course in Algorithms.

Details of the content of the module

1. Set Cover (I)

2. Set Cover (II)

3. Set Cover for Intervals, Squares

4. Set Cover for Disks

5. Weighted Set Cover for Unit Squares

6. Hitting Set for Disks/Squares

7. Unique Cover for Disks/Squares

8. Min Ply Cover

9. Min-membership Set Cover

10. Min Membership Geometric Set Cover

11. Implementation and Experiments (I)

12. Implementation and Experiments (II)

Schedule of the module

Start Date: 25 October, 2025.

End Date: 05 November, 2025.

(All days unless notified otherwise.)

Meeting link : Will be shared later

Contact email ID: siddharthas1@iisc.ac.in

Registration link:
https://shorturl.at/M7O01