Procedure for MS interviews

Department of Computer Science and Engineering, IIT Madras May 2024

The aim of the interview process for MS candidates is to assess the knowledge and problem solving ability of the candidate in subjects that are fundamental to Computer Science and Engineering, and to assess the independent thinking ability and research aptitude of the candidate.

The candidate will be required to answer questions related to topics in one subject chosen by the candidate from the list of the subjects specific to the Panel; see the Panel specific subjects in the following page. In addition to the primary subjects chosen by the candidate, the candidate may also be required to answer some basic questions in other subjects. The duration of the interview for a candidate may be about 20 - 30 minutes.

List of topics

Panel A: Theoretical Computer Science and related areas

- Discrete Mathematics (Logic, Proofs, Counting and Combinatorics, Sets, Relations, and Functions)
- Graph Theory
- Theory of Computation
- Data Structures and Algorithms
- Basics of Probability
- Design and Analysis of Algorithms
- Basic Complexity Theory
- Basics of Cryptography

Panel B: Computer Systems and related areas

- Digital Logic Design
- Computer Organization and Architecture
- Compilers
- Operating Systems
- Computer Networks
- Database Management Systems

Panel C: Al, ML and related areas

- Discrete Mathematics
- Data Structures
- Design and Analysis of Algorithms
- Linear Algebra
- Probability Theory