

# CS5201: Advanced Artificial Intelligence

## Project-I



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# Topics

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- Monte Carlo Tree Search
  - [Related paper1](#), [Related paper2](#)
- Approaches for solving Job Shop Scheduling and its types
  - [Related paper-1](#) [Related paper2](#)
- Heuristic/Metaheuristic approaches to solve 2D/3D Bin Packing Problem (BPP)
  - [Related paper1](#), [Related paper2](#), [Related paper3](#)
- Heuristic/Metaheuristic approaches to solve 3D Container Loading Problem (CLP) in Vehicle Loading Routing Problems (VLRPs)
  - [Related paper1](#), [Related paper2](#), [Related paper3](#)
- Heuristic & Metaheuristic Approaches to the Nurse Rostering Problem (NRP)
  - [Related paper1](#), [Related paper2](#), [Related paper3](#)
- Conflict-Based Search (CBS) and Heuristics for Multi-Agent Path Finding (MAPF)
  - [Related paper1](#), [Related paper2](#)

# Guidelines

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- Group size - at most 4 students
- Create a video of 15-20 minutes, upload on youtube and share the link
- Everyone should present in the video
- The person's face must be visible in the video while speaking (Explore obs studio)
- Deadline 7th March, 2026

*Thank you!*