1. Background
   1. Research Area
      1. Multi-robot planning
      2. AI planning
      3. AI searching: advance problem of the structure search space since heuristic search does not scale.
   2. Industrial Robots (e.g. mining)
      1. Path planning
      2. Task planning
      3. Autonomous robot in manufacture
2. Amazon
   1. Combination of multi-path finding algorithm with limited area and congestion scheduling based approach
   2. Multi-robot in structural trails (multi-agent path planning)
      1. Problem: Free run robots in unistructural space -> causes large search spaces
      2. Solution: (1) sample the space (2) random tree (3) constrained optimization
3. Topics to learn:
   1. Understand the basic search methods
   2. Path finding and path planning: continuous planning
   3. Multi-robot coordination
      1. How you schedule & planning
      2. How to coordinate
4. Discussion Topics (4/13)
   1. Recommendation on the operation practice: (Kiva Picking Optimization, KPO team, wiki: https://w.amazon.com/bin/view/KivaPickingOptimization/)
      1. How long the shift should be? Do we need any overlap of the shift?
      2. Charging? How long should the robot charging?