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## Introduction and Graph-based Plan Methods

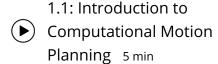


CJ Taylor

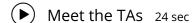
Welcome to Week 1! In this module, we will introduce the problem of planning routes through grids where the robot

✓ More

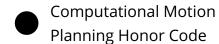
## Introduction



(/learn/robotics-motionplanning/lecture/hE9C7/1-1-introduction-tocomputational-motion-planning)



(/learn/robotics-motionplanning/lecture/7zvfD/meet-the-tas) Help Center



(/learn/robotics-motionplanning/supplement/WC0M4/computationalmotion-planning-honor-code)



MATLAB Tutorial I - Getting Started with MATLAB

(/learn/robotics-motionplanning/supplement/JMxDP/matlab-tutorial-igetting-started-with-matlab)



Resources for Computational **Motion Planning** 

(/learn/robotics-motionplanning/supplement/uYYXI/resources-forcomputational-motion-planning)

## Graph-based Path Planning



1.2: Grassfire Algorithm 6 min

(/learn/robotics-motion-planning/lecture/ZxAgg/1-2-grassfire-algorithm)



1.3: Dijkstra's
Algorithm 5 min

(/learn/robotics-motion-planning/lecture/0ZfAg/1-3-dijkstras-algorithm)



(▶) 1.4: A\* Algorithm 7 min

(/learn/robotics-motion-planning/lecture/Vv9fL/1-4-a-algorithm)



Quiz: Graph-based Planning Methods 4 questions

(/learn/robotics-motionplanning/exam/zZvks/graph-based-planningmethods)



MATLAB Tutorial II -**Programming** 

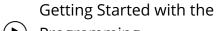
(/learn/robotics-motionplanning/supplement/0CF0I/matlab-tutorial-iiprogramming)

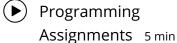


**Assignment:** Graph-based

Planning 3h 00m

(/learn/robotics-motionplanning/programming/UNHm0/graph-basedplanning)





(/learn/robotics-motionplanning/lecture/L3Yf2/getting-started-with-theprogramming-assignments)