

CSCI-4290/6290: Robot Motion Planning
Lecture 10: September 26, 2003
Potential Field Methods

Announcements

Assignment 2 is due on Wednesday, October 1 by 11:59:59pm. Please check the Assignment 2 page for updates and announcements.

Today's Class

Today we look at *potential field techniques*. These methods were originally developed as real-time planning methods.

1. Potential fields: potential functions and force fields
2. Path planning: best-first planner
3. Navigation functions

Reading

Chapter 4, Choset et al.

Chapter 8–8.2, *Planning Algorithms* by LaValle.

Chapter 7 through Section 7.4, Latombe. (optional)

Next Class

Randomized potential field methods.