

Course Wrap ☹️

CSE398/498
29 April 05

Administration

- Memory stick turn-in
- If you have not done so already, please provide me links to your team report and source code for Challenge 4
- Shameless Plugs:
 - Robocup IS for Summer & Fall '05
 - CSE397/497 Introduction to Mobile Robotics
- Final Review
- Course Evaluation

Why are we having the final?

- Mid-semester evaluation feedback:

“No homework or exams - if the robot can play soccer at the end of the semester, that should be the final.”

Final Overview

- When & Where:
 - Thursday, 5 May 05, 0800-1100, PL416
- Format:
 - General Knowledge ($\approx 25\%$)
 - Algorithms ($\approx 25\%$)
 - Tekkotsu Code Implementations ($\approx 50\%$)

General Knowledge

- The “Big Picture”
- 10-20 questions
- Tests for general understanding of the principles/algorithms presented in the lectures without focusing on the implementation details
- Possible topics to be tested:
 - All material presented in the course lectures

Algorithms

- Implementation details for the algorithms
- 3-5 questions
- What you should know:
 - Vision algorithms (color & edge segmentation)
 - Motion planning (potential fields, best-first search, wavefront propagation)
 - Coordinate transforms/forward kinematics (similar to the homework)
 - Localization (direct methods, GDOP derivation)
 - Kalman filter (1-D implementation, n-D model)
- What you are NOT accountable for:
 - Motion Planning (visibility graph & other cell decomposition methods)
 - Hough transforms
 - EKF/Particle filters

Tekkotsu Code Implementations

- Tekkotsu framework
- ≈ 2 questions
- What you should know:
 - Implementing Behaviors
 - Finite State machines
 - Tekkotsu specific commands relevant to the four challenges
- Bottom line: If you have been writing code in the lab, this section should be straightforward

Last Pitch...



Course Evaluations...