

Team Project

Video Analysis and Strategic Planning for RoboCup Players



Dr. Stephan Kopf
Spring / Summer 2010

Task

Design / program software to control RoboCup players

- Part 1: Simulation League
Spring / Summer 2010
- Part 2: Small Size League
Autumn / Winter 2010

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Part 1: Simulation League

- Develop distributed algorithms to coordinate multiple agents in a dynamic environment
- Use rules from RoboCup simulation league
- Duration: March – July, 2010

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Part 2: Small Size League

- You do **not** need to use the strict rules from RoboCup Small Size League
- Plan equipment acquisition (functionality, limited budget)
- Develop computer vision algorithms to identify players, court lines and the ball
- Duration: August - December, 2010

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First Steps

- Organize yourself (plan regular meetings, Email, Skype, phone numbers)
- Define plans and milestones
- Analyze the RoboCup simulation league
- Define the requirements (software, hardware,...)
- Set up software (Windows / Linux, repository (CVS/SVN), programming language (JAVA/C++), development environment (MSVC/Eclipse),...)
- Work as a team → distribute the tasks
- In case of problems: contact me immediately !

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Deliverables

- July 2010: working system based on RoboCup simulation league
 - Documentation (made available on the Web)
 - 1-2 monthly reports of work done by each member (max. 5 keywords for each member)
 - a progress report of ½ page each month (open issues, already finished), can be done in table form
 - requirement specification, user guide, technical description of algorithms used
 - Presentation (Talk)
- December 2010: working system with real robots
 - Documentation + Presentation (see above)

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Teams

- Team 1
 - Marc Eble
 - Stefan Wilk
 - Kai Rommel
- Team 2
 - Swen Ledig
 - Sasa Nikic
 - Luis Roa

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Meetings

During the first weeks:

- Regular meetings (weekly !)
- Suitable dates:
Monday (B1 or B2), Friday (B4)

Next Meeting:

Monday, March 15, 2010, Time: 10:15-11:45
Room: C112

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Contact

Contact

- Stephan Kopf
kopf@informatik.uni-mannheim.de
www.fmi.uni-mannheim.de/de/lehrstuhl-pi4/

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