WrightEagle Simulation 2D

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How To Start For The USTC League Match
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Introduction
Ultimate Goal
History
In China
Simulation 2D League

- RoboCup: Robot World Cup

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- RoboCup: Robot World Cup
- RoboCup has been used as a research challenge in parallel with a usage for educational purposes, and to stimulate the interest of the public for robotics and AI.

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- RoboCup: Robot World Cup
- RoboCup has been used as a research challenge in parallel with a usage for educational purposes, and to stimulate the interest of the public for robotics and AI.
- Each year since 1997, researchers from different countries have gathered to play the world cup.

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- RoboCup has been used as a research challenge in parallel with a usage for educational purposes, and to stimulate the interest of the public for robotics and AI.
- Each year since 1997, researchers from different countries have gathered to play the world cup.
- The event has drawn an increasing amount of interest from the public, as robotics is still not commonplace.

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By mid-21st century, a team of fully autonomous humanoid robot soccer players shall win the soccer game, comply with the official rule of the FIFA, against the winner of the most recent World Cup!

http://www.robocup.org

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- RoboCup 2008, Suzhou, China
- RoboCup 2007, Atlanta, USA
- RoboCup 2006, Bremen, Germany
- RoboCup 2005, Osaka, Japan
- RoboCup 2004, Lisbon, Portugal
- RoboCup 2003, Padua, Italy
- RoboCup 2002, Fukuoka, Japan
- RoboCup 2001, Seattle, USA
- RoboCup 2000, Melbourne, Australia
- RoboCup 1999, Stockholm, Sweden
- RoboCup 1998, Paris, France
- RoboCup 1997, Nagoya, Japan

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- The first RoboCup Competition in China was held in Chongqing in 1999. There are only 2 participants: Tsinghua University and USTC.

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- The first RoboCup Competition in China was held in Chongqing in 1999. There are only 2 participants: Tsinghua University and USTC.

- The first RoboCup China Open was held in Suzhou in 2006. RoboCup China Open 2008 will be held in Zhonshan. There will be some foreign teams from USA, Japan, Germany, Singapore, Iran, etc.

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- The first RoboCup China Open was held in Suzhou in 2006. RoboCup China Open 2008 will be held in Zhonshan. There will be some foreign teams from USA, Japan, Germany, Singapore, Iran, etc.
- The participants of China include: The Institute of Automation of the Chinese Academy of Sciences, Tsinghua University, Beijing University, Zhejiang University, Shanghai Jiao Tong University, USTC, etc.

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- The Simulation 2D league is based on s simulator called the Soccer Server, a physical soccer simulation system.

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Simulation 2D League

- The Simulation 2D league is based on s simulator called the Soccer Server, a physical soccer simulation system.
- All games are visualized by displaying the field of the simulator by the soccer monitor on a computer screen.

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Simulation 2D League

- The Simulation 2D league is based on s simulator called the Soccer Server, a physical soccer simulation system.
- All games are visualized by displaying the field of the simulator by the soccer monitor on a computer screen.
- A match is carried out in a client/server style. Communication between the server and each client is done via UDP/IP sockets.

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Introduction
WrightEagle Simulation 2D Team

- WrightEagle belongs to Multi-Agent Systems Lab., Department of Computer Science and Technology, USTC. The supervisor is **Prof. Xiaoping Chen**.

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- There are 4 teams in WrightEagle:

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WrightEagle Simulation 2D Team

- WrightEagle Simulation 2D Team is the first team established in WrightEagle. Compared to other teams, we pay more attention on the high level decision of Multi-Agent Systems.

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- Our tasks:

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- Our tasks:
  - Preparing for RoboCup and RoboCup China Open each year
  - Doing research in decision making and cooperation in Multi-Agent Systems
- Now, we have three full members:
  - **Ke Shi** (SA07011): shike15@mai.ustc.edu.cn
  - **Aijun Bai** (PB05011): baj@mail.ustc.edu.cn
  - **Yunfang Tai** (PB05011): tyf@mai.ustc.edu.cn

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Our Competition Results

- 2005: 2nd place of RoboCup and 1st place of RoboCup China Open

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- 2008: 2nd place of RoboCup and ...

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- 2008: 2nd place of RoboCup and ...
- 2009: ...

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The Requirements For The Freshmen

- Interest

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The Requirements For The Freshmen

- Interest
- Enough time

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The Requirements For The Freshmen

- Interest
- Enough time
- Strong programming skill in C++

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Introduction
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The Requirements For The Freshmen

- Interest
- Enough time
- Strong programming skill in C++
- The spirit of never give up and work hard for champion

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Website

- RoboCup 2009, Graz, Jun. 29 - Jul. 5, 2009
  http://www.robocup2009.org/

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  http://www.robocup.de/RC08/

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  http://wrighteagle.org/2D/

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  http://www.robocup.de/RC08/
- RoboCup Simulation 2D Data Page
  http://wrighteagle.org/2D/
- WrightEagle BBS
  http://202.38.79.187/sharepoint/

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Linux
Configer Your System
Install SoccerServer
UVA Source Code

- The SoccerServer of RoboCup Simulation 2D can be installed in any Linux systems, such as Suse, Ubuntu, Gentoo and etc.

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- Linux system consist of the kernel and other application programs. At present, there are more than 100 different Linux systems.

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- Linux system consist of the kernel and other application programs. At present, there are more than 100 different Linux systems.
- The SoccerServer consist 4 packages: rcssbase, rcssserver, rcssmonitor, rcsslogplayer. We need to install the 4 packages in our Linux system.

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- Configure GCC:

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- Configure GCC:
  - sudo apt-get install build-essential

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Linux
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- Configure GCC:
    - sudo apt-get install build-essential
- Install necessary libraries:

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Linux
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Install SoccerServer
UVA Source Code

- Configure GCC:
  - sudo apt-get install build-essential
- Install necessary libraries:
  - sudo apt-get install libboost-dev

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- Configure GCC:
    - sudo apt-get install build-essential
- Install necessary libraries:
    - sudo apt-get install libboost-dev
    - sudo apt-get install libboost-filesystem1.34.1

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  - sudo apt-get install libboost-filesystem-dev
  - sudo apt-get install libx11-dev

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- Install SoccerServer

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- Install SoccerServer
  - ./configure

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    - make

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    - make
    - sudo make install
    - sudo /sbin/ldconfig

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Linux
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    - make
    - sudo make install
    - sudo /sbin/ldconfig
- Test the installing
    - rcsoccersim

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    - make
    - sudo make install
    - sudo /sbin/ldconfig
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    - sudo /sbin/ldconfig
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    - sudo make install
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- Start a match

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  - download the UVA source code

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  - ./start.sh

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    - PlayerTeams.cpp

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  - Player.(h|cpp)

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    - Player.(h|cpp)
    - WorldModel.(h|cpp)

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    - WorldModel.(h|cpp)
    - BasicPlayer.(h|cpp)

Thank you for your attention!
Q & A