Multi-Agent Programming Contest 2016 Participation Registration Template

To be added...

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Abstract. Please follow the given template structure for your submission by answering the questions as concisely as possible, not exceeding the total of 5 pages. It is vital to explain in this submission how you are using a multiagent approach.

Please submit this document as PDF to the mailing list.

 $\begin{array}{c} {\rm due} \\ {\bf 15th \ of \ August, \ 2016 \ (extended \ deadline)} \end{array}$

Introduction

Note: The information you provide in this vary section will be made available to all participants. We will put it on the homepage.

- 1. What is the name of your team?
- 2. Who are the members of your team? Please provide names, academic degrees and institutions.
- 3. Who is the main-contact? Please also provide an Email address.
- 4. How much time (man hours) will you have invested (approximately) until the tournament?

System Analysis and Design

- 1. Briefly, what is the main strategy of the team?
- 2. Will you use any existing multi-agent system methodology such as Prometheus, O-MaSE, or Tropos?
- 3. Do you plan to distribute your agents on several machines?
- 4. Is your solution based on the centralisation of coordination/information on a specific agent? Conversely if you plan a decentralised solution, which strategy do you plan to use?
- 5. Describe the communication strategy in the agent team. Can you estimate the communication complexity in your approach?
- 6. Describe the team coordination strategy (if any)
- 7. How are the following agent features implemented: *autonomy*, *proactiveness*, *reactiveness*?

Software Architecture

- 1. Which programming language do you plan to use to implement the multiagent system? (e.g. 2APL, Jason, Jadex, JIAC, Goal, Java, C++, ...)
- 2. Which development platform and tools are you planning to use?
- 3. Which runtime platform and tools are you planning to use? (e.g. Jade, AgentScape, simply Java, ...)
- 4. Which algorithms will be used?

Please explain the reasons for your answers.

Agent team strategy

Please address the following points, or at least comment if not applicable:

- 1. Describe the team coordination strategy (if any)
- 2. Does your team strategy use some distributed optimization technique w.r.t. e.g. minimizing distances travelled by the agents?
- 3. Describe and discuss the information exchanged (and shared) in the agent team.
- 4. Describe the communication strategy in the agent team. Can you estimate the communication complexity in your approach?
- 5. Did your system do some background processing, i.e. some computation which happened while agents of the team were *idle*, e.g. between sending an action message to the simulation server and receiving a perception message for the subsequent simulation step?
- 6. Possibly discuss additional technical details of your system like e.g. failure/crash recovery and alike.