# Multi-Agent Programming Contest 2016 Participation Registration Template

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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.*

due
**15th of August, 2016** (extended deadline)

## 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?

   **lampe**

2. Who are the members of your team? Please provide names, academic degrees and institutions.

   **Philipp Czerner, TU Clausthal, 447447**
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   **Jonathan Pieper, TU Clausthal, 443560**
   **jpie14@tu-clausthal.de**

3. Who is the main-contact? Please also provide an Email address.

   **Any team member can be contacted**
   **Emails are listed above**

4. How much time (man hours) will you have invested (approximately) until the tournament?

   **Approximately 150 man hours**

## System Analysis and Design

1. Briefly, what is the main strategy of the team?

   **A mothership, controlling the agents, will use
   a heuristic approach to determine lucrative jobs**

2. Will you use any existing multi-agent system methodology such as Prometheus,
   O-MaSE, or Tropos?

   **No**

3. Do you plan to distribute your agents on several machines?

   **Our program will run on one machine**

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?

   **We use a centralized mothership**

5. Describe the communication strategy in the agent team. Can you estimate
   the communication complexity in your approach?

   **Agents will send their perceptions to and
   receive commands from the mothership. Since
   all agents are emulated on one machine,
   this communication is entirely virtual**

6. Describe the team coordination strategy (if any)

   **see above**

7. How are the following agent features implemented: *autonomy*, *proactiveness*,
   *reactiveness*?

   **Due to centralization, our agents are virtually
   not autonomous. The mothership will estimate
   costs to complete jobs and act accordingly**

## Software Architecture

1. Which programming language do you plan to use to implement the multi-
   agent system? (e.g. 2APL, Jason, Jadex, JIAC, Goal, Java, C++, ...)

   **C++**

2. Which development platform and tools are you planning to use?

   **g++ via msys, and code editors (i.e. Emacs and Visual C++)**

3. Which runtime platform and tools are you planning to use? (e.g. Jade,
   AgentScape, simply Java, ...)

   **Our program utilizes only Windows libraries**

4. Which algorithms will be used?

   **Nothing noteworthy**

Please explain the reasons for your answers.