

*** Call for Participation - ANAC 2015 ***

We would like to invite you to participate in the Sixth Automated Negotiating Agents Competition, ANAC 2015. The deadline for submission is 1 March, 2015

Web site: <http://www.tuat.ac.jp/~katfuji/ANAC2015/>

*** ANAC 2015 ****

The Sixth International Automated Negotiating Agents Competition (ANAC 2015) To be held in conjunction with the International Joint Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), Istanbul, Turkey, 5th-9th May 2015.

*** Overview of ANAC 2015 ***

The ANAC competition brings together researchers from the negotiation community and provides a unique benchmark for evaluating practical negotiation strategies in multi-issue domains. The five previous competitions have spawned novel research in AI in the field of autonomous agent design which are available to the wider research community. The focus of this year's competition is on **multi-party negotiation**.

The goals of the competition are:

- * to encourage the design of practical negotiation agents that can proficiently negotiate against unknown opponents and in a variety of circumstances,
- * to provide a benchmark for objectively evaluating different negotiation strategies,
- * to explore different learning and adaptation strategies and opponent models, and
- * to collect state-of-the-art negotiating agents and negotiation scenarios, and making them available to the wider research community.

The following information is an abstract of the rules of the competition. Full information can be found on the ANAC 2015 website:

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*** Entrants ***

The aim for the entrants to the competition is to develop an autonomous negotiation agent. Performance of the agents will be evaluated in a tournament setting, where each agent is matched with all other submitted agents, and each triple of agents will negotiate in a number of linear negotiation scenarios. Negotiations are repeated several times to obtain

statistically significant results.

*** Rules of Encounter ***

Negotiations are multilateral and based on a multi-player version of the alternating-offers protocol.

Offers are exchanged in real time with a deadline after 3 minutes. In addition, there will be a discount factor in about half of the domains, where the value of an agreement decreases over time. The challenge for an agent is to negotiate without any knowledge of the preferences and strategies of the opponents.

Agents can be disqualified for violating the spirit of fair play. The competition rules allow multiple entries from a single institution, but require each agent to be developed independently.

*** Main updates with respect to ANAC 2014 ***

This year, the challenge is to reach an agreement while negotiating with two opponents at the same time. This year, the utility functions are linear again, as they were in ANAC 2010-2013.

The multi-player protocol is a simple extension of the bilateral alternating offers protocol, called the Stacked Alternating Offers Protocol for Multi-Lateral Negotiation (SAOPMN). According to this protocol, all of the participants around the table get a turn per round; turns are taken clock-wise around the table. The first party starts the negotiation with an offer that is observed by all others immediately. Whenever an offer is made the next party in line can take the following actions:

1. Make a counter offer (thus rejecting and overriding the previous offer)
2. Accept the offer
3. Walk away (e.g. ending the negotiation without any agreement)

This process is repeated in a turn taking clock-wise fashion until reaching an agreement or reaching the deadline. To reach an agreement, all parties should accept the offer. If at the deadline no agreement has been reached, the negotiation fails.

*** Qualifying Round and Finals ***

There will be no qualifying rounds. The teams of the top 8 performing agents will be notified, and the final results will be announced at the AAMAS conference.

It is expected that teams that make it through to the finals will have a representative attending the AAMAS 2015 conference. Each team in the

final will have the opportunity to give a brief presentation describing their agent.

Intention of Registration

We would like to know who are willing to participate in the competition.

By registering your information via this form, we can inform about Genius update and ANAC2015 information and so on.

Please register your information from the following URL: <http://goo.gl/forms/yUsGLNKsKa>

*** Important Dates: ***

Deadline for submission: 1st March, 2015

Announcement of the finalists: 1 April, 2015

*** Venue ***

The conference will be held at the Istanbul Congress Center
Taskisla Caddesi Harbiye 34367 Istanbul/ Türkiye

*** Organising Committee ***

Dr. Reyhan Aydogan, Delft University of Technology

Dr. Tim Baarslag, University of Southampton

Prof. Katsuhide Fujita, Tokyo University of Agriculture and Technology

Dr. Koen Hindriks, Delft University of Technology

Prof. Dr. Takayuki Ito, Nagoya Institute of Technology

Prof. Dr. Catholijn Jonker, Delft University of Technology

*** Prizes ***

The prize money will be at least 500 Euro. The prize will be shared among the top agents in two categories: (1) winners in terms of individual utility, and (2) winners in terms of social welfare (measured by obtaining the highest average product of utilities of both parties).

*** Sponsors ***

Makoto lab. Inc.

*** Contact ***

For any questions, the main contact is R.Aydogan@tudelft.nl