Call for Papers
Agent-based Approaches for Transportation Modelling and Optimisation
(AATMO'2014)
Salamanca, 4th-6th June, 2014

The Agent-based Approaches for Transportation Modelling and Optimisation (AATMO'2014) workshop, is associated with the 12th Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMS 2014), taking place on 4th-6th June, 2014 in Salamanca, Spain (http://www.paams.net/).

The aim of the workshop is to gather and present different types of the applications of multi-agent and agent-based approaches for modelling and solving optimisation problems related to transport and traffic. The nature of this group of problems makes them an interesting field for applying multi-agent systems because of the various possible degrees of autonomy of interacting decision elements, their distributed and decentralised character, as well as the dynamic of the varying reliability and correctness of the knowledge that constructs their environment models.

Different models determining destinations to be visited may be taken into account, including sets of shipments to be delivered, public transport schedules and individual preferences for leisure itineraries or pedestrian behaviours. Special attention is given to the construction and optimisation of multi-modal paths. The methods of traffic optimisation using intelligent road information systems and advanced adaptive mechanisms of intersection control are also in the domain of interest. For solving these problems, different methods may be applied in agent-based and multi-agent systems, which include negotiations, planning, organisation models, as well as heuristic, machine learning and data mining algorithms.

The scope of interest includes, however, is not limited to the application of agent-based technologies to:
* Route planning and scheduling, and their dynamic modification,
* Construction of multimodal paths
* Line planning for public transport
* Choice of optimal and efficient decision strategies in transportation and traffic systems using machine learning and data-mining methods
* Autonomy/decentralisation of decision entities and quality of solutions in transportation systems
* Intelligent traffic control systems based on agents,
* Adaptation to new decision strategies and changing state of the environment in transportation systems,
* Intelligent composition of transportation units,
* Intelligent management of shipment composition, storing, freight handling and trans-shipments
* Modelling of human agent (pedestrian, driver, …) behaviour
* Agent coordination, platoons, groups
* Innovative services in transportation, public transport, traffic control,

Submissions

Papers must consist of original, relevant and previously unpublished sound research results related to any of the topics of the conference.

All papers must be formatted according to the CCISSeries Springer template, with a maximum length of 10-12 pages, including figures and references.

The template can be downloaded

http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0. All proposed papers must be submitted in electronic form (PDF format) using the Paper Submission Page.

Important Dates

Submission dates   20th January, 2014
Notification of acceptance   24th February, 2014
Camera-ready deadline   10th March, 2014
Conference dates   4th-6th June, 2014

Review process

AATMO welcomes the submission of application papers with preference to the topics listed in the call for papers. All submitted papers will undergo a thorough review process; each paper will be refereed by at least three experts in the field based on relevance, originality, significance, quality and clarity.

Publication

Accepted papers will be included in PAAMS 2014 Proceedings, published in the CCIS Series series of Springer (http://www.springer.com/series/7899).

At least one of the authors will be required to register and attend the symposium to present the paper in order to include the paper in the conference proceedings. All accepted papers will be published by Springer Verlag.