

# PRIMA 2018

The 21st International Conference on Principles  
and Practice of Multi-Agent Systems

October 29 – November 2, 2018

AIST Tokyo Waterfront, Tokyo, Japan.

<http://2018.prima-conference.org/>

**CALL FOR PAPERS**



Software systems are becoming more intelligent in the kind of functionality they offer users. At the same time, systems are becoming more decentralized, with components that represent autonomous entities who must communicate among themselves to achieve their goals. Examples of such systems range from healthcare and emergency relief and disaster management to e-business and smart grids. A multiagent worldview is crucial to properly conceptualizing, building, and governing such systems. It offers abstractions such as intelligent agent, protocol, norm, organization, trust, incentive, and so on, and is rooted in solid computational and software engineering foundations. As a large but still growing research field of Computer Science, multiagent systems today remains a unique enabler of interdisciplinary research.

## Important Dates (EXTENDED!):

**Submission Due: August 1, 2018 (11:59PM UTC-12)**

Notification: September 2, 2018

Camera Ready Due: September 13, 2018

Conference: October 29 – November 2, 2018

## Information for Authors:

The PRIMA 2018 Program Committee invites submissions of original, unpublished, theoretical and applied work strongly relevant to multiagent systems, including reports on the development of prototype and deployed agent systems, and of experiments that demonstrate novel agent system capabilities. An indicative list of topics is provided below.

The papers can be submitted to one of the following categories:

- Regular papers: These papers can be up to 16 pages in length in the Springer LNCS format. Note that some regular papers may be accepted as short papers.
- Short papers: These papers can be up to 8 pages in length in the Springer LNCS format. These 'early-innovation' papers will be reviewed with an emphasis on novelty/originality of the idea.

Note that all the submitted papers must be in a form suitable for double-blind review. In order to make blind reviewing possible, authors must omit their names and affiliations from the paper.

All accepted papers will be published in Springer's Lecture Notes in Artificial Intelligence series (LNCS/LNAI).

## Special Issue:

Selected papers will also be invited to submit an extended version to a fast track of the Journal of Autonomous Agents and Multi-Agent Systems.

## Topics of Interest:

Topics of interest include (but are not limited to) the following:

- Logic and Reasoning: Logics of agency; Logics of multiagent systems; Norms; Argumentation; Computational Game Theory; Uncertainty in Agent Systems; Agent and Multi-Agent Learning
- Engineering Multi-Agent Systems: Agent-Oriented Software Engineering; Interaction protocols; Commitments; Institutions and Organizations; Normative Systems; Formal Specification and Verification; Agent Programming Languages; Middleware and Platforms; Testing, debugging, and evolution; Deployed System Case Studies
- Agent-Based Modeling and Simulation: Simulation Languages and Platforms; Artificial Societies; Virtual Environments; Emergent Behavior; Modeling System Dynamics; Application Case Studies
- Collaboration & Coordination: Planning; Distributed Problem Solving; Teamwork; Coalition Formation; Negotiation; Trust and Reputation
- Economic paradigms: Auctions and mechanism design; Bargaining and negotiation; Behavioral game theory; Cooperative games: theory & analysis; Cooperative games: computation; Noncooperative games: theory & analysis; Noncooperative games: computation; Social choice theory; Game theory for practical applications
- Human-Agent Interaction: Adaptive Personal Assistants; Embodied Conversational Agents; Virtual Characters; Multimodal User Interfaces; Mobile Agents; Human-Robot Interaction
- Decentralized Paradigms: Grid Computing; Service-Oriented Computing; Cybersecurity; Robotics and Multirobot Systems; Ubiquitous Computing; Social Computing; Internet of Things
- Application Domains for Multi-Agent Systems: Healthcare; Autonomous Systems; Transport and Logistics; Emergency and Disaster Management; Energy and Utilities Management; Sustainability and Resource Management; Games and Entertainment; e-Business, e-Government, and e-Learning; Smart Cities; Financial markets; Legal applications

## Committee:

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