

International Workshop on “Computational Modeling and Discovery in Social Systems (CMDSS)”

<http://aser.ornl.gov/events/cmdss2010/>

held in conjunction with the
Second IEEE International Conference on Social Computing (SocialCom)
August 20-22, 2010, Minneapolis, Minnesota, USA

<http://www.iisocialcom.org/conference/socialcom2010/>



The goal of CMDSS-10 is to provide a platform for encouraging computational modeling and discovery in social systems and for exploring new paths towards the future of social computing.

The human social system is an interconnected, rapidly changing, and deeply uncertain system. Social phenomena are emergent behaviors of the social system because they are shaped by individual behavior choices and social interactions. Understanding such highly complex social systems requires a wide range of nonlinear mathematical and nondeterministic computational theories and models.

A large amount of digitized social data is generated daily, providing the opportunity to examine the data and analyze the social behaviors represented by the data. Because of the vast amount of data, social computing research has come to use computational modeling and discovery technologies for analyzing and understanding social behaviors, interactions, and emergent patterns of complex social systems. By combining computational modeling and discovery technologies with high-performance computing, scientists will be able to build large-scale, human social system simulations to understand the complex interactions and emergent behaviors in human societies.

The current trend of increased complexity and data volume is expected to continue. While many scientists have recognized the relevance and importance of computational modeling and discovery in social systems, computational exploration of social systems remains fairly tentative and preliminary. This workshop provides a platform for computer scientists and social scientists to come together to discuss the challenges, innovations and future directions in the combination of these diverse, yet complementary fields. Topic areas of interest include, but are not limited to:

- Dynamic opinion modeling and social information retrieval;
- Cascading effects modeling in social and socio-technical systems;
- Agent-based social simulation;
- Model and discovery validation and verification;
- Parallel and distributed implementation of social modeling and discovery;
- Swarm intelligence, evolutionary computation, emergent behavior, other nature/social-inspired emerging techniques;
- New social system discovery algorithms and models;
- Social data processing, data mining, and knowledge discovery;
- High performance computing for social modeling and discovery;
- Other applications of social modeling and discovery.

Workshop Paper Submission:

Papers should be in IEEE conference paper style, be 6 pages or less in length, and be in MS Word or PDF format. See the workshop site <http://aser.ornl.gov/events/cmdss2010/> to submit your paper. All papers will be peer reviewed. If accepted, at least one of the authors must attend the conference to present the work in order for the paper to be included in the workshop section of the conference proceedings and in the IEEE Digital Library. Selected best papers will be recommended for submission to special issues of journals.

Important Dates:

Draft Paper Submission: ~~May 1, 2010~~ extended to **May 15, 2010** Notification of Acceptance: June 15, 2010
Camera Ready Paper Due: June 22, 2010 Author Registration: June 22, 2010

Workshop Organizers:

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