Call for Participation
Workshop on Computational Aspects of Game Theory
Electronics and Communication Sciences Unit
Indian Statistical Institute, Kolkata
June 16 - 20, 2014

Overview
This workshop will provide an introduction to the topic of game theory from a computer science perspective. Game theory is a very useful mathematical framework that is used to represent and analyze interactions, in the form of conflict or cooperation, between people, corporations, countries, and even automated software agents. Conventionally, game theory is studied under the field of micro-economics in relatively small settings of 2-3 players. Over the past decade, several computational algorithms have been proposed to solve larger, multi-player games and game theory-based solution strategies have been applied successfully in several domains such as Internet auctions, Google AdWords, energy-aware computing, social networks, etc. This course will provide an introduction to the fundamentals of game theory and discuss the recent algorithmic solution concepts in game theory along with some recent applications of game theory in different domains.

Audience
The workshop is targeted towards senior (4th year) undergraduate students and graduate students in computer science and information technology. Understanding of mathematical concepts of linear programming and constraint satisfaction will be helpful. Familiarity with at least one programming language (C, C++ or Java) is required.

Desired Outcome
Students taking this workshop will be able to develop programming tools for solving game theory problems using a computer programming language. This will be beneficial for advanced level graduate courses and research, as well as for programming competitions. For instance, the Google summer of code program annually invites student participants to write software tools for solving game theory problems and the trading agent competition involves solving practical problems using game theory concepts. This course will also give the students the necessary foundation to explore advanced theoretical topics and concepts in game theory.

Application Procedure
Interested candidates are requested to apply by sending a brief CV (only in pdf) that includes name, affiliation, address, contact numbers and email, academic records, project work, research experience, and publications, if any, to ecsu@isical.ac.in with a copy to dilip73@gmail.com by May 28, 2014. Short-listed candidates will be informed individually by email.

Registration Fee
Short-listed candidates must register by paying Rs. 1000/- through Demand Draft or account payee cheque drawn in favor of “Indian Statistical Institute” payable at “Kolkata” within June 09, 2014.

Speaker
Prithviraj (Raj) Dasgupta
Mutual of Omaha Endowed Associate Professor
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Venue
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