FLAIRS-22
SANIBEL ISLAND

Special Track on

Uncertain Reasoning

The Special Track on Uncertain Reasoning (UR) is the oldest FLAIRS special track, running annually since 1996. The UR'09 Special Track at the 2009 FLAIRS Conference is the 14th in the series. UR'09 seeks to bring together researchers working on broad issues related to reasoning under uncertainty. Topics pertaining to the special track included, but were not limited to, uncertain reasoning formalisms, calculi and methodologies; reasoning with probability, possibility, fuzzy logic, belief function, vagueness, granularity, argumentation, rough sets, and probability logics; modeling and reasoning using imprecise and indeterminate information, such as Choquet capacities, comparative orderings, convex sets of measures, and interval-valued probabilities; exact, approximate, and qualitative uncertain reasoning; graphical models of uncertainty; multi-agent uncertain reasoning and decision making; decision-theoretic planning and Markov decision process; temporal reasoning and uncertainty; epistemic logics; nonmonotonic and conditional logics; similarity-based reasoning; construction of models from elicitation, data mining, and knowledge discovery; uncertain reasoning in information retrieval, filtering, fusion, diagnosis, prediction, and situation assessment; and practical applications of uncertain reasoning.

Through rigorous reviews by the program committee, UR'09 accepted 9 full papers and 4 posters from 18 submissions, which are included in this proceedings. The accepted papers give a broad and diverse sample of current work on uncertain reasoning, including theoretical and applied research based on different paradigms. The work presented includes developments on Bayesian and possibility theory, stochastic games, dynamic models, time series forecasting, default rules and certainty constraints, among other topics. We hope that the variety and richness of this track will help to promote cross fertilization among the different approaches for uncertain reasoning, and in this way foster the development of new ideas and paradigms. A special issue of the *International Journal of Approximate Reasoning* will publish extended versions of the top papers in the UR track.