FLAIRS-22
SANIBEL ISLAND

Special Track on

Case-Based Reasoning

Following successful special tracks on case-based reasoning at FLAIRS over the past seven years, we invited papers for the Eighth Special Track on CBR at the 22nd International FLAIRS Conference. Case-based reasoning is an AI problem solving and analysis methodology that retrieves and adapts previous experiences to fit new contexts. This forum is intended to gather AI researchers and practitioners with an interest in CBR to present and discuss developments in CBR theory and application.

Submission topics included foundations of CBR; methods for CBR (such as representation, indexing, retrieval, adaptation); evaluation methods for CBR systems and integrations; practical applications of CBR; textual CBR; CBR and creativity; CBR and design; distributed CBR; case based maintenance; spatio-temporal CBR; CBR in the health sciences; CBR integrations; case based planning; and CBR and games.

The invited speaker for the special track for 2009 is Ashok Goel from the Georgia Institute of Technology, USA. The title of his talk is "Multimodal Case-Based Reasoning." Much research on case-based reasoning has focused on conceptual and causal knowledge of past experiences, though there has also been some research on visual case-based reasoning. However, there are many tasks that require multimodal case-based reasoning. Understanding sketches, drawings and diagrams is an example of such a task; causality in a drawing, for example, is, at most, implicit. Addressing such tasks requires a new scheme for case representation and organization, one that enables case-based inferences about causality from visual-spatial representations. In this talk, Ashok Goel describes a computational technique for understanding engineering drawings by constructing a teleological model of the target drawing by analogy to the model of a known drawing.