

Invited keynote talk:

Statistical Relational Learning – A Logical Approach

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ABSTRACT

In this talk I will briefly outline and survey some developments in the field of statistical relation learning, especially focussing on logical approaches. Statistical relational learning is a novel research stream within artificial intelligence that combines principles of relational logic, learning and probabilistic models. This endeavor is similar in spirit to the developments in Neural Symbolic Reasoning in that it attempts to integrate symbolic representation and reasoning methods with the advantages of subsymbolic representations. In the talk, I shall attempt to make this link more explicit and to present an overview of the state of the art in Statistical Relational Learning. This overview shall start by providing some background in logical approaches to learning (relational learning and inductive logic programming) and then extend it with probabilistic elements.