

# “SUBATOMIC DISCOVERIES” IN BAYESIAN NETWORK INFERENCE

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**Friday, April 19, 2013**

**3:30 PM**

**RIC 208**

Bayesian networks have become an established framework for uncertainty management in artificial intelligence and have been successfully applied in a wide variety of applications. In this talk, several recent “subatomic discoveries” in Bayesian network inference will be reviewed. More specifically, we will reveal the internal structure and semantics of the probability information propagated during inference. Lastly, it will be demonstrated how internal structure and semantics can be exploited for faster inference.

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