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Education

M.S. in Computer Sciences, University of Wisconsin – Madison, 2000

B.S. in Electrical Engineering, University of Wisconsin – Madison, 1996

Research Interests

My research is directed towards the study of machine learning algorithms with a focus on those applicable to the analysis of bioinformatics problems. In particular, I am interested in investigating the properties of relationships among machine learning tasks. This entails identifying and defining different types of relationships and in developing and evaluating a set of machine learning methods which exploit these relationships to yield more accurate models. Currently we are exploring how the relationships among regulatory elements in bacteria, such as promoters, terminators and operons, can be best used to train probabilistic models of these elements.

Professional Experience

1/00 - present Research Assistant, Department of Computer Sciences, University of Wisconsin

1/99 - 1/00 Project Assistant, Department of Computer Sciences, University of Wisconsin

8/98 - 1/99 Teaching Assistant, Department of Computer Sciences, University of Wisconsin

1/97 - 8/98 Software Engineer, Microsoft Corporation

Publications

J. Bockhorst and M. Craven (2002). Exploiting Relationships Among Concepts to Acquire Weakly Labeled Training Examples. To appear in *Proceedings of the 19th International Conference on Machine Learning*,
(Among 33% of submissions accepted.)

J. Bockhorst and M. Craven (2001). Refining the Structure of a Stochastic Context Free Grammar. In *Proceedings of the 17th International Joint Conference on Artificial Intelligence*.
(Among 24% of submissions accepted.)

M. Craven, D. Page, J. Shavlik, J. Bockhorst, and J. Glasner (2000). A Probabilistic Learning Approach to Whole-Genome Operon Prediction. In *Proceedings of the 8th International Conference on Intelligent Systems for Molecular Biology*, 116-126. AAAI Press.
(Among 29% of submissions accepted.)

M. Craven, D. Page, J. Shavlik, J. Bockhorst, and J. Glasner (2000). Using Multiple Levels of Learning and Diverse Evidence Sources to Uncover Coordinately Controlled Genes. In *Proceedings of the 17th International Conference on Machine Learning*, 199-206. Morgan Kaufmann.
(Among 43% of submissions accepted.)