## Colloquium

## Finding a Happy Medium between Accuracy and Speed for Dependency Parsing

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**Abstract:** Why is Natural Language Processing interesting? What makes NLP hard? How can we bring NLP research to practice? These are all open-ended questions. In this talk, I present a novel approach called selectional branching, which optimizes both accuracy and speed for one of core NLP tasks, dependency parsing. Our approach uses confidence estimates to decide when to employ a beam, providing the accuracy of beam search at speeds close to a greedy dependency parsing approach. Selectional branching is guaranteed to perform faster than beam search yet performs as accurately. With the benchmark setup in English, our parser shows an accuracy of 92.96

Thursday, March 6, 2014, 4:00 pm Mathematics and Science Center: W306

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