

## **Postdoc in Statistical Learning Theory and Methods**

Applications are invited for a postdoctoral position in the area of statistical learning theory and methods, as part of an NSF funded research project on "Weakly Supervised Learning" led by Professors Clayton Scott and Ambuj Tewari. The project aims to build the theoretical and algorithmic foundations of supervised learning problems where the labels are revealed partially, or with uncertainty, to the learning algorithm. Such weakly supervised problems include classification with noisy labels, anomaly detection, crowdsourcing, semi-supervised learning, domain adaptation, transfer learning, multiple instance learning, and learning from partial labels. These problems, in turn, arise in a variety of application domains such as computer vision, natural language processing, robotics, and information retrieval.

The ideal candidate will have a PhD in Computer Science, Electrical Engineering, Statistics, or a related discipline. (S)he will have prior background in rigorously deriving performance guarantees for learning algorithms in a formal mathematical framework. (S)he will be responsible for driving the core research agenda, implementing newly developed algorithms, and working with domain experts and graduate students to test the algorithms in real applications. Some degree of autonomy beyond the weakly supervised learning project may also be negotiated.

The annual salary will be in the \$50K range (plus fringe benefits). The position will initially be for one year but may extend to a second year subject to a progress evaluation at the end of the first year. The University of Michigan is a leading research university known internationally for its vibrant community of scientists and scholars, including a strong contingent of machine learning researchers. The successful applicant will have ample opportunities for professional development through interactions with researchers in Computer Science, Complex Systems, Electrical Engineering, Mathematics, Information Studies, Statistics, and other disciplines. The city of Ann Arbor offers a culturally and intellectually rich experience to its residents, who have access to numerous restaurants, shops, museums, parks, and live events.

Review of applications begins December 1, 2014 and will continue until the position is filled. We expect the candidate to start as soon as possible but no later than July 1, 2015. Applicants should send a CV to weakly.supervised@umich.edu.