

## A Banner Year

Outstanding Paper Award at AAAI. Best Paper Award at ICML. Best Research Paper Award at KDD. The list goes on: seven major best paper awards in twelve months, capping off a fantastic year for the artificial intelligence group at Cornell.

Our *annus mirabilis* truly highlights a radical “phase transition,” signaled by Cornell’s breaking into the *US News World Report’s* list of top ten AI departments this year. Indeed, within the Computer Science Department, almost all of the current AI faculty have been at Cornell for less than fifteen years, and roughly half have spent less than a decade here.

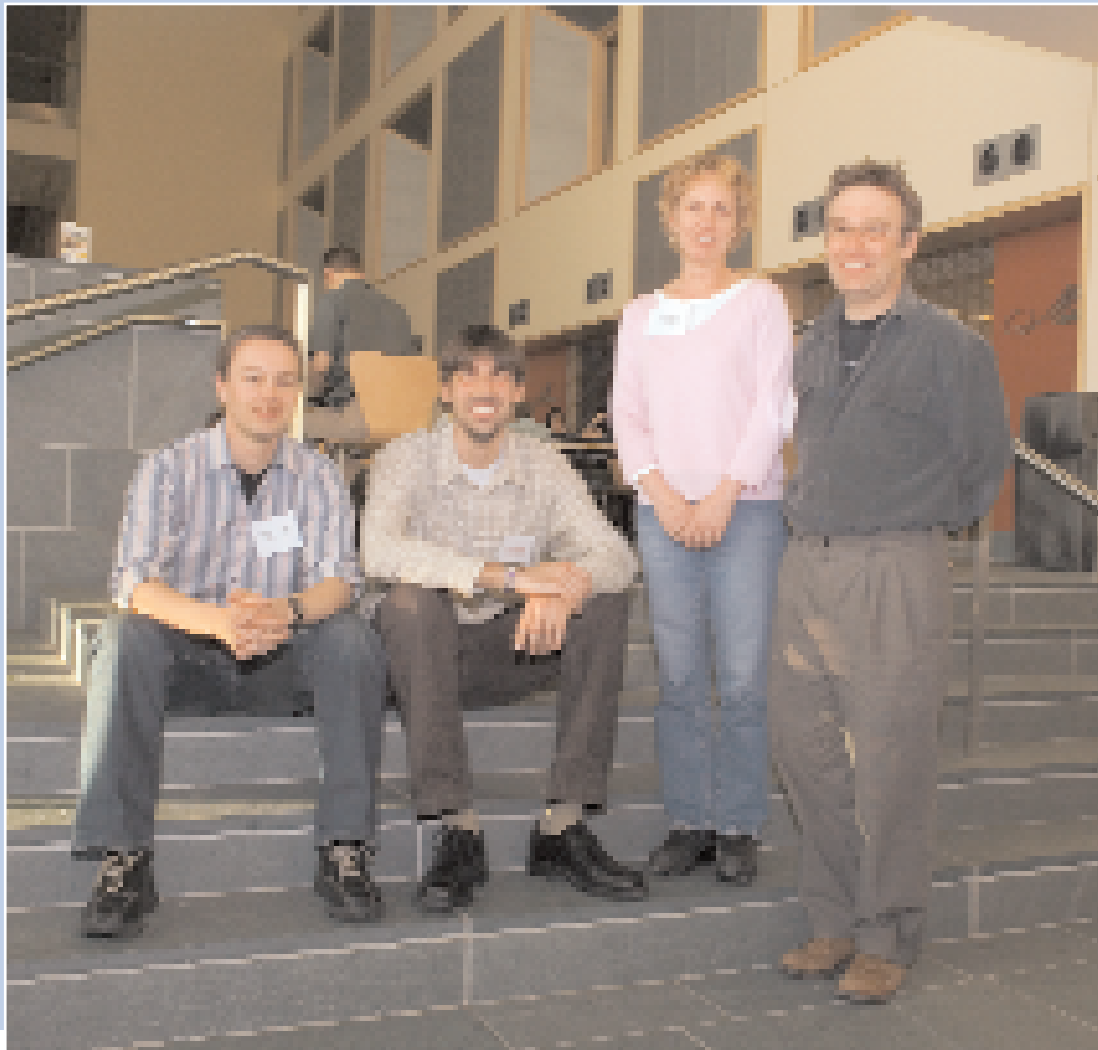
In this short time span, the Computer Science Department has created world-class groups in core artificial intelligence and in key sub-areas, such as machine learning, natural language processing, and computer vision. Interdisciplinary activities abound, facilitated by the larger umbrellas of CIS, cognitive studies, and related programs across campus, as well as the

Intelligent Information Systems Institute, a multi-million-dollar, decade-long effort supported by the US Air Force Office of Scientific Research.

Our students created a new conference this year, organizing the first Northeast Student Colloquium on Artificial Intelligence (NESCAI). This entirely graduate-student-run event, held at Cornell, attracted participants from eighteen

schools, including peer institutions in Boston, Montreal, Philadelphia, and Pittsburgh (see news article at <http://www.news.cornell.edu/stories/May06/NESCAI06.ws.html> or the conference website at <http://www.cs.cornell.edu/Conferences/nescai/schedule.php>). Based on the success of its initial outing, this meeting will surely become a very popular annual event.

All in all, a year of “firsts” and “bests.” Now we’re looking forward to what the “nexts” will be!



## Interdisciplinary Collaborations: A Sampling

Claire Cardie is working with faculty in the Cornell Law School and the School of Hotel Administration to help citizens understand and participate, via the Internet, in the process of creating new government regulations.

Rich Caruana, Johannes Gehrke, Mirek Riedewald, and researchers at the Cornell Lab of Ornithology are tracking and analyzing changes in the environment by applying data mining to citizen-science data collected by the bird-monitoring community, one of the largest, longest-running sources of environmental time-series datasets in existence.

Joe Halpern is working with Cornell economists to create computational models of decision making.

Thorsten Joachims’s work with researchers in the Communications Department and Information Science Program has led to a new understanding, via data collected from eyetracking experiments, of how people interact with search engines such as Google.

Hod Lipson and his group are developing novel active learning methods to infer hidden dynamical systems by intelligently perturbing them. These methods are being applied across a range of disciplines such as systems biology and robotics.

Ramin Zabih is bringing his expertise in computer vision to radiology, collaborating with doctors at the Weill Cornell Medical College to improve the analysis of MRI output.

## Selected 05-06 AI Best Paper Awards

*Best Paper Award, Twenty-second International Conference on Machine Learning (ICML 2005)*  
Thorsten Joachims

*Distinguished Student Paper Award (of four), ICML 2005*  
Alexandru Niculescu-Mizil and Rich Caruana

*Distinguished Student Paper Award (of four), ICML 2005*  
Thomas Finley and Thorsten Joachims

*Best Research Paper Award, Eleventh ACM International Conference on Knowledge Discovery and Data Mining (KDD 2005)*  
Jure Leskovec, Jon Kleinberg, and Christos Faloutsos

*Best Student Paper Award, KDD 2005*  
Filip Radlinski and Thorsten Joachims

*Best Paper Award, Tenth International Conference on Principles of Knowledge Representation and Reasoning (KRR 2006)*  
Joseph Halpern, Larry Blume, and David Easley

*Outstanding Paper Award, Twenty-first National Conference on Artificial Intelligence (AAAI 2006)*  
Carla Gomes, Ashish Sabharwal, and Bart Selman