

Calibration and Probabilistic Prediction in Machine Learning

Friday December 17, 2004

Organizers: Rich Caruana & Greg Grudic
(See workshop webpage for latest schedule)

Friday morning session: 7:30am–10:30am

- 7:30am **Welcome**, *Rich Caruana and Greg Grudic*
- 7:40am **Probabilistic Forecasts in Meteorology**, *Caren Marzban, University of Washington*
- 8:00am **Learning Well-Calibrated Probabilistic Classifiers**, *Pedro M Domingos, U of W*
- 8:20am *coffee break*
- 8:30am **Calibrating multi-class one-versus-one classifiers without examining all combinations**,
John Platt, Microsoft Research
- 8:50am **Isotonic Regression**, *Charles Elkan, University of California, San Diego*
- 9:10am **An Analysis of Power vs. Calibration for Probabilistic Models**,
Grigoris Karakoulas, University of Toronto
- 9:30am **Using Asymmetric Distributions to Improve Classifier Probability Estimates**,
Paul N. Bennett, CMU
- 9:50am **Probabilistic SVMs - How Much Scaling Do We Need?**,
Stefan Ruping, Dortmund University
- 10:10am **Probabilities From CDFs in Basis Function Regression and Classification**,
Greg Grudic, University of Colorado at Boulder

Friday afternoon session: 4:00pm–7:00pm

- 4:00pm **Evaluating Predictive Uncertainty Challenge**, *Joaquin Quiñonero Candela*
- 4:50pm **Healing the Predictive Distribution of the Relevance Vector Machine through Augmentation**,
Carl Edward Rasmussen and Joaquin Quiñonero Candela, Max Planck Institute
- 5:10pm **Probabilities in Microarray Analysis**, *Neil Lawrence, University of Sheffield*
- 5:30pm *coffee break*
- 5:40pm **Deterministic Calibration and Nash Equilibrium**,
Sham Kakade and Dean Foster, University of Pennsylvania
- 6:00pm **Estimating Class Membership Probabilities using Classifier Learners**,
John Langford, Toyota Tech. Inst. at Chicago, Bianca Zadrozny, IBM T.J. Watson
- 6:20pm **Predicting Good Probabilities via Ensemble Selection**,
Rich Caruana and Alex Niculescu, Cornell University