# Call for Papers: NIPS 2005 Workshop on Machine Learning for Implicit Feedback and User Modeling

http://www.cis.hut.fi/inips2005/

## And: Inferring Relevance from Eye Movements Challenge 2005

http://www.cis.hut.fi/eyechallenge2005/

Core event of the PASCAL EU Network of Excellence

### Background

The workshop is intended to gather together machine learning researchers interested in a new promising and challenging research area. Half of the papers will introduce best-performing solutions of the Challenge of inferring intent of users based on eye movement signals. The rest will broaden the scope towards other implicit feedback signals such as click streams, and towards more general problems of user modeling.

The tasks require advanced signal processing and feature extraction, and dynamic machine learning models. Several branches of machine learning are applicable, and we expect eye movement data to become a new challenging testbench for machine learning algorithms.

We have made eye movement data available in the form of a Challenge where the objective is to predict from eye movement data whether a reader finds a text relevant. The scientific goals of the Challenge are to advance machine learning methodology, to find the best eye movement features, and to learn of the psychology underlying eye movements in search tasks. The challenge has been organized for the PASCAL EU Network of Excellence, but participation is open to all.

#### Submission

Papers are sought in two categories: (i) papers based on Challenge submissions, and (ii) regular papers. Both will be refereed, and may be accepted as oral or poster presentations. Shorter position papers are possible.

A non-comprehensive list of relevant phrases: Adaptive user interfaces, Eye movements, Human-computer interfaces, Implicit feedback, Machine learning methods, Modeling of user intent, Personalization, Proactive systems, Statistical modeling, User modeling, (connection to) Vision research

The papers will be made available in the Web, and either a special issue of a journal or an edited book is being planned of selected papers.

Length: 2-6 pages. Follow the NIPS format (http://www.nips.cc/Conferences/current/CFP/CallForPapers.php). Submit papers at http://www.cis.hut.fi/inips2005/

#### **Pascal Invited Talk**

Greg Edwards, founder and CTO of Eyetools Inc.

Brief description from www.eyetools.com:

Eyetools was born in 2000 out of the Stanford University Advanced Eye Interpretation Project. After seeing the business value of eyetracking resulting from the Stanford-Poynter Project, a collaborative study between the Poynter Institute and Stanford University's Department of Communications around the viewing of online news sites, founder Greg Edwards spun out Eyetools. Since then, Eyetools' pioneering work in inferring mental state from eye movements and visualizing eyetracking data has led to several key patents in the area, and has enabled eyetracking to be put into use more easily by an ever expanding number of companies and people. Eyetools' roots in Human-Computer Interaction began in 1995.

### Venue

NIPS 2005 Workshops, Whistler, December 9 or 10 (date not yet fixed). More details at http://www.nips.cc/ Conferences/2005/

### Deadlines

Sep 30 Submissions to Challenge 1 (easier one) Oct 14 Submissions to Challenge 2 (more difficult) Oct 21 Deadline for papers By mid November Notification of acceptance Nov 21 Camera ready papers Dec 9 or 10 Workshop (date not yet fixed)

Note: Challenge deadlines have been extended because of the late notice for the NIPS workshop.

#### **Program Committee**

Samy Bengio, IDIAP Helene Hembrooke, Cornell Thorsten Joachims, Cornell Samuel Kaski, Helsinki University of Technology Ilpo Kojo, Helsinki School of Economics Petri Myllymäki, University of Helsinki Kai Puolamäki, Helsinki University of Technology Kari-Jouko Räihä, University of Tampere John Shawe-Taylor, University of Southampton

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