

MIT2000-08: Adaptive Information Filtering with Minimal Instruction

Tommi Jaakkola, Tomaso Poggio and David Gifford





- We wish to retrieve relevant information from large unstructured databases
  - the underlying technical difficulties are shared across various retrieval tasks
- We develop a particular synthesis of machine learning methods to solve these challenges



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**Progress Through December 2000** 

- Efficient representations for accurate information filtering
- Information theoretic approach to optimal elicitation of user feed-back
- Sequential error correcting codes for multiway information filtering
- Characterization of when we can and cannot expect to be able to use incomplete information



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**Research Plan for the Next Six Months** 

- Overall focus gradually shifting towards implementation and testing of proof of concept tools
  - elicitation of user feed-back
  - multi-way information filters
- Formulation and utilization of transfer across multiple tasks