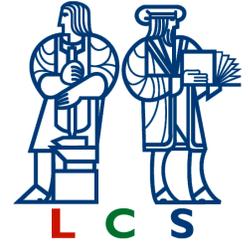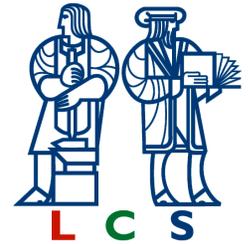# Project Overview

- We seek to fundamentally improve the search of relevant information from large relatively unstructured databases

- Our goal is to develop an optimal interactive retrieval system

  - We substantially extend and integrate existing machine learning methods to solve the associated challenges

  - We design and develop proof of concept tools

Progress Through December 2002

- A general formulation of the information regularization principle to exploit large numbers of unlabeled documents in filtering tasks

- Algorithms for generalized low-rank matrix factorization and an application to collaborative filtering

- A compression approach to feature selection across multiple document filtering tasks
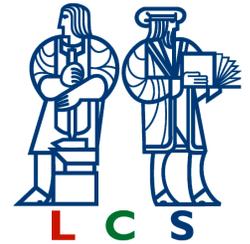
Research Plan for the Next Six Months

- ## Selected tasks:
  - Testing and efficient implementation of information regularization for large filtering tasks
  - Combining information regularization with active learning
  - Extension of the overall active learning approach to filtering problems involving multiple simultaneous topic categories (with Dr. Ueda)