CHRISTOPH LAMPERT
Statistical Machine Learning
IST Block Course

Description:

This course provides an introduction to modern statistical machine learning, in particular probabilistic models and kernel methods. Emphasis lies on supervised learning techniques (classification, regression) and their applications in computer vision, natural language processing, computational biology and other disciplines. The course will be held as a 1-week block course, consisting of classroom lectures in the morning and exercise sessions in the afternoon. Additionally, daily exercise sheets will be given out to be solved by the participants in small groups.

Syllabus:

- Introduction to Machine Learning
- Generative Probabilistic Models
- Discriminative Probabilistic Models
- Structural Risk Minimization
- Kernel Methods
- Model Selection and Feature Selection
- Ensemble Methods
- Outlook

Prerequisites: Basic knowledge in Statistics and Linear Algebra (will be refreshed shortly during the course).

Monday, February 21, 2010 to Friday, February 25, 2010
Courses will start at 10.15 am

Seminar Room Mondi 1, IST Austria Central Building, 1st floor
A shuttle bus from Vienna Heiligenstadt to IST Austria and back will be offered depending on need
Please register a week before the course starts under: gradschool@ist.ac.at.