

EINLADUNG

Zeit: Freitag, 27. April 2012, 13.30 Uhr

Ort: 5052, Ahornstr. 55

Referent: Dipl.-Inform. Philippe Dreuw

Thema: Probabilistic Sequence Models for Image
Sequence Processing and Recognition

Hidden Markov model (HMM) based approaches are probably the method of choice if continuous symbol streams, such as character strings, gesture sequences, or signed words have to be recognized. Such symbols and their corresponding appearance typically vary over time and are realized within an important spatio-temporal context.

This work investigates the image sequence labelling problems optical character recognition (OCR), object tracking, and automatic sign language recognition. To address these problems we investigate which concepts and ideas can be adopted from speech recognition to these problems. For each of these tasks we propose an approach that is centered around the approaches known from speech recognition and adapted to the problem at hand. In particular, we describe our HMM based image sequence recognition system which has been adopted from a large vocabulary continuous speech recognition framework and extended for the different tasks.

Experimental results are provided for OCR, object tracking, and sign language recognition on standardized benchmark sets and evaluation metrics.

Es laden ein: Die Dozenten der Informatik