



INFORMATICS COLLOQUIUM

Speaker:

Speaker: Prof. Maria Jose Castro-Bleda, Univ. Politècnica de València, Spain

Automatic and Assisted Text Transcription

Abstract:

In the first part of the talk, we will describe the work of our team in preprocessing and recognizing handwritten text. In particular:

- The use of new techniques to remove slope and slant from handwritten text and to normalize the size of text images with ANNs.
- The use of hybrid Hidden Markov Model (HMM)/Artificial Neural Network (ANN) models for recognizing unconstrained offline handwritten text.
- The use of connectionist language models for text recognition.

We will show experiments on the offline handwritten text lines from the IAM database, in comparison to the ones reported in the literature and in conjunction with other methods.

The second part of the talk will be devoted to present our multimodal assisted transcription tool, STATE. The system comprises a graphical front-end that can be easily connected to different text recognition back-ends. A recorded demo will be presented, showing the front-end and two back-ends: one based on nearest neighbors (for ancient printed text) and one based on hybrid HMM/ANN models (for unconstrained handwritten text).

Bio:

María José Castro is an Associate Professor of the Departamento de Sistemas Informáticos y Computación at the Universitat Politècnica de València, Spain, where she has taught since 1993. She received her Ph.D. degree in Computer Science from this same University, in 1998. Her research interests include machine learning, speech and handwritten text recognition and language technologies.

Date and time: Wednesday 23rd April 2014, 5 pm
Location: Pérolles II, room A230, Bd de Pérolles 90, Fribourg
Contact person: Prof. Marcus Eichenberger-Liwicki

The colloquium is free and open to the public.