

New methods for writer identification

This project is a collaboration between:

Anders Hast, Associate professor (Docent), Department of Information Technology, Division of Visual Information and Interaction, Uppsala University. Research Area: Handwritten text recognition (Computer Science & Mathematics)

Lars Mårtensson, Associate Professor (Docent), Faculty of Education and Business Studies, University of Gävle. Research area: Digital Palaeography (Scandinavian languages)

Project Description

This project is part of the Handwritten Text Recognition effort at the Division of Visual Information and Interaction at Uppsala University in collaboration with a project dealing with digital palaeography at the University of Gävle. The aim for the PhD project is to develop and evaluate methods for writer identification in medieval documents. Such identification will primarily be based on image content, rather than analysis of transcribed texts. One such approach is to use and develop different methods for word spotting, which can identify certain characteristics in the writers' script, but also to use and develop methods for describing general features of the script. The PhD student will use and develop methods in the areas of pattern recognition, image processing, computer vision and machine learning. Such algorithms will be implemented on GPU's and on parallel clusters. The applicant should have a strong background in mathematics and programming. Knowledge of machine learning is meriting and experience from GPU programming is also desirable.