



Warehousing Images in the Digital Hospital: Interpretation, Infrastructure, and Integration

WIDTH Newsletter

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Visiting Aachen, Germany, June 13th to June 28th, 2013

Prof. Luo and Prof. Zhou of China Capital Medical University, Beijing, China, met with Prof. Deserno of RWTH Aachen University, Aachen, Germany

On Thursday, June 13th, the Chinese delegation safely arrived at Aachen and was guided to the University Guest House, expecting an interesting full month stay in Germany with a variety of activities: The first week was scheduled with intensive discussion at RWTH Aachen University and Uniklinik RWTH Aachen followed by a visit to Prof. Reinhold Haux, Peter L. Reichertz Institute of Medical Informatics in Braunschweig and jointly attending the Computer Assisted Radiology and Surgery (CARS) Conference in Heidelberg, where the Chinese partners were presenting a poster in their work.

The Aachen visit started with a field trip to Aachen downtown, the old Cathedral funded by Charlemagne in the eighth century, which is now protected as UNESCO world heritage, the Rheinisch Westfälische Technische Hochschule (RWTH) Aachen University, the University hospital and its surrounding. In particular, the “Drielandenpunt” was visited where Germany, Belgium and the Netherlands meet together. Here, visitors can instantaneously stay in three nations at once.



On Monday, June 17th, a comprehensive welcome colloquium was scheduled to honour the Chinese partners Professor Luo and Professor Zhou. In total 16 short talks given by students as well as scientific members of the German group provided an overview of the diverse research activities in Medical Informatics, Medical Image Processing and Medical Data Management.



One focus of research at the Department of Medical Informatics, RWTH Aachen University, is image and data management for clinical trials, including interfaces, for data items, signal recordings (e.g., ECG) and non-DICOM imaging modalities, such as photography. Image and signal data is processed automatically to extract image-based surrogate endpoints in the controlled clinical trials. In such projects, smart phones are used for imaging and instantaneous transfer of image data.

On Tuesday 18th, Professor Luo was invited to give a presentation on the topic “X-ray Phase Contrast Imaging and Its Medical Application”. This presentation was scheduled in the large lecture hall of Aachen University Hospital and – as it was open to the public – the talk was visited by almost 30 attendees, from our Department as well as from other clinics and institutes of Aachen University Hospital.

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One of the highlights actually was the social event that took place on Tuesday evening. The field trip to Maastricht, The Netherlands, with the Chinese delegation, the key scientists from the German department as well as a Chinese student at the Department of Medical Informatics are shown in the following picture.

Further discussions between the two groups followed during the CARS conference in Heidelberg. The road map for future joint activities are based on image registration using the scale invariant feature transform (SIFT). This method is used for 3D-reconstruction as well as content-based image retrieval and will concatenate the research between Chinese and German partners within the WIDTH project.



Following the fruitful discussions on scientific content, the Chinese delegation was also introduced into German taste of local beer. The picture shows the variety of so called “Weizen”, a special type of German beer that can be enjoyed with and without alcohol.

Maastricht is one of the rare places where Catholic churches have been deconsecrated and reused. In particular, you can find an old church that is now operated as a public book store.





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DIARY DATES

**WIDTH 2013: An International Workshop in
Warehousing Images in the Digital Hospital
July 15-16 2013
Athens, Greece**

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