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Publications

Journal publications

R. van 't Klooster, P. J. H. de Koning, R. A. Dehnavi, J. T. Tamsma, A. de Roos, J. H. C. Reiber, R. J. van der Geest. Automatic lumen and outer wall segmentation of the carotid artery using deformable three-dimensional models in MR angiography and vessel wall images. *Journal of Magnetic Resonance Imaging*, 2012 Jan;35(1):156-65.

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R. van 't Klooster, A. J. Patterson, V. E. Young, J. H. Gillard, J. H. C. Reiber, R. J. van der Geest. An objective method to optimize the MR sequence set for plaque classification in carotid vessel wall images using automated image segmentation. *PLOS ONE*, 2013 Oct 23;8(10):e78492.

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S. Gao*, **R. van 't Klooster***, D. F. van Wijk, A. J. Nederveen, B. P. F. Lelieveldt, R. J. van der Geest. Accuracy and reproducibility of automated atherosclerotic carotid artery plaque classification in MR vessel wall images. *Submitted*.

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R. van 't Klooster, M. T. B. Truijman, A. C. van Dijk, F. H. B. M. Schreuder, M. E. Kooi, A. van der Lugt, R. J. van der Geest. Visualization of local changes in vessel wall morphology and plaque progression in serial carotid artery MRI. *Submitted*.

Abstracts and presentations

J. H. C. Reiber, I. M. Adame, P. J. H. de Koning, **R. van 't Klooster**, I. Isgum, K. DeMarco, R. J. van der Geest. Magnetic resonance angiography and vessel wall imaging: great tools for assessing atherosclerosis. *North American Society for Cardiovascular Imaging Annual Meeting*, 2007.

I. Isgum, **R. van 't Klooster**, P. J. H. de Koning, F. Jabi, K. DeMarco, J. H. C. Reiber, R. J. van der Geest. Automatic Detection of Atherosclerotic Carotid Plaque From Combined Magnetic Resonance Angiography and Vessel Wall Images. *European Congress of Radiology*, 2008.

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Book chapters

R. J. van der Geest, P. H. Kitslaar, P. J. H. de Koning, **R. van 't Klooster**, W. J. Jukema, G. Koning, H. A. Marquering, J. H. C. Reiber. Advanced three-dimensional postprocessing in computed tomographic and magnetic resonance angiography. In: V. B. Ho and G. P. Reddy, *Cardiovascular Imaging*, St Louis, MO, 2011:1128-1143.

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Curriculum Vitae

Ronald van 't Klooster was born on the 9th of March, 1981 in Laren. After graduation at the Willem de Zwijger College in Bussum in 1999, he started studying Electrical Engineering at Delft University of Technology. He chose the specialisation Media and Knowledge Engineering and the minor Biomedical Engineering. His graduation project was carried out at the Division of Image Processing of the Leiden University Medical Center, on the subject of the automatic quantification of osteoarthritis in hand radiographs. After graduation in 2006, he accepted a research position in the same lab and worked on the automated evaluation of vascular MR image data.

In 2010, he started his PhD research on the segmentation and registration of multi-sequence MR vessel wall images of the carotid artery in cross-sectional, dynamic and longitudinal studies for the assessment of atherosclerosis. The research was carried out within the framework of CTMM, the Center for Translational Molecular Medicine, project PARISK "Plaque At Risk" in close collaboration with the Biomedical Imaging Group Rotterdam, several medical centers, and industrial partners. A number of the developed methods were successfully transferred to the industrial partners.

Currently, Ronald is working at Quantib B.V. in Rotterdam as Research & Development Engineer. Quantib B.V. is a medical technology company that develops innovative software in the field of quantitative MRI and CT image analysis.