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Model-driven segmentation of X-ray left ventricular angiograms

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Publications

Peer reviewed papers in international journals

E. Oost, P.V. Oemrawsingh, J.H.C. Reiber, and B.P.F. Lelieveldt, “Automated Left Ventricular Delineation in X-ray Angiograms: A Validation Study”, Accepted for publication in *Catheterization and Cardiovascular Interventions*, 2008.

E. Angelié, **E.R. Oost**, D. Hendriksen, B.P.F. Lelieveldt, R.J. van der Geest, and J.H.C. Reiber, “Automated Contour Detection in Cardiac MRI Using Active Appearance Models: The Effect of the Composition of the Training Set”, *Investigative Radiology*, vol. 42, no. 10, pp. 697-703, 2007.

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E. Oost, G. Koning, M. Sonka, J.H.C. Reiber and B.P.F. Lelieveldt, “Automated Segmentation of X-Ray Left Ventricular Angiograms Using Multi-View Active Appearance Models and Dynamic Programming”, *In: Proceedings of FIMH 2005*, A.F. Frangi et al. Eds., vol. 3504, pp. 23-32, 2005.

C.R. Oost, B.P.F. Lelieveldt, M. Üzümcü, H. Lamb, J.H.C. Reiber, and M. Sonka, “Multi-View Active Appearance Models: Application to X-Ray LV Angiography and Cardiac MRI”, *In: Proceedings of IPMI 2003*, C.J. Taylor and J.A. Noble Eds., vol. 2732, pp. 234-245, 2003.

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Elco Oost
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Curriculum Vitae

Cornelis Roel (Elco) Oost was born in Rutten, the Netherlands, in 1976. In 1994 he graduated from the VWO at the Emelwerda College in Emmeloord, after which he started a study in Agricultural Engineering at the Wageningen University. Within the Systems and Control Group he completed a graduation project on adaptive control in greenhouse climate and a graduation project on automatic in-row mechanical weeding. After also fulfilling a traineeship at the Bio-oriented Technology Research Advancement Institution of the Institute of Agricultural Machinery in Omiya, Japan, he received his MSc. degree in November 2000.

After a short extension of his stay at Wageningen University, he started working at the Laboratory for Clinical and Experimental Image Processing (LKEB) of the Leiden University Medical Center in October 2001. His main topic of research was the application of statistical models to the automatic delineation of the cardiac left ventricle in X-ray left ventricular angiography, of which this thesis mainly reports. Other research topics included the coupling of diagnostic image information between the function scan, perfusion scan and delayed contrast enhancement scan in short-axis cardiac MRI. Currently he is working on the automatic detection and quantification of atherosclerotic plaque in CT images of the coronary arteries.

