TECHNISCHE UNIVERSITÄT WIEN
Institut für Computergraphik und Algorithmen
Arbeitsbereich für Computergraphik

vrvis zentrum für virtual reality und visualisierung forschungs-gmbh

OESTERREICHISCHE COMPUTER GESELLSCHAFT AUSTRIAN COMPUTER SOCIETY

laden gemeinsam zum

GASTVORTRAG

Marcel Breeuwer
Eindhoven University of Technology

"From medical images to clinical care – the long and winding road"

Abstract:

This presentation will first briefly discuss the relevance of using medical image analysis and visualization in health care, and thereafter present a number of example clinical applications of image analysis and visualization in the domains of cardiovascular, neurological and oncological disease. The focus will be on using magnetic resonance imaging (MRI).

Despite the enormous amount of medical imaging research and development performed in the last decades, only a very limited number of applications are currently routinely used in clinical practice. The road from idea to a clinically adopted and widely used application will be reviewed in order to create insight into the many steps to be taken to develop and introduce truly meaningful innovations.

Biography:

In 1982 Marcel Breeuwer received his degree in Electrical Engineering from the Technical University of Delft, The Netherlands, and in 1985 he received his PhD from the Free University of Amsterdam, The Netherlands. From 1985 until 1996 he was Research Scientist at the Philips Research Laboratories, Eindhoven, The Netherlands, where he investigated data compression of audio, video and medical images. In 1996 he started as Senior Scientist at Philips Healthcare, Best, The Netherlands in the area of image-guided surgery and medical image analysis. In 2006 he became Principal Scientist and head of the cardiovascular team in the Clinical Science & Advanced Development department of the Business Unit Clinical Informatics Solutions and beginning 2010 he moved to the Clinical Science department of the Business Unit Magnetic Resonance. Focus of his R&D is on medical image analysis and visualization and on computational modeling applications for supporting the care of patients with cardiovascular disease, neurological disease, or cancer. He has led several externally funded projects and has represented Philips Healthcare in numerous European funded research projects. He is (co)author of over 100 scientific publications and is (co)inventor of over 40 patent applications (of which 27 in the domain of healthcare). He is part-time professor (1 day/week) in the medical image analysis group (IMAG/e) of the Biomedical Engineering department of the Eindhoven University of Technology, The Netherlands, with focus on the clinical application of image analysis and visualization. He is member of the Board of the Dutch Society of Pattern Recognition and Image Processing (NVPHBV).

Datum: 24. Juni 2016, 10:30 Uhr s.t.
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