Fakultät II   *Informatik, Wirtschafts- und Rechtswissenschaften*
Department für Informatik

Kolloquium

Am Donnerstag**, dem 19. Juli 2012,** um **16:15 Uhr** hält

Professor Youfu Li
Department of Mechanical and Biomedical Engineering,
City University of Hong Kong, Kowloon, Hong Kong

einen Vortrag mit dem Titel

Motion tracking from visual sensing

Der Vortrag findet im Raum A14-1-113 statt.

Abstract:

Motion and trajectory tracking plays an important role in characterizing human or robot actions and behaviours. However, effective descriptors are currently lacking that can fully depict spatial trajectories in 3D. In this work, I will present our research in 3D visual sensing, visual tracking for trajectory acquisition. A novel signature is proposed for free form trajectory description in Euclidean space. The signature admits rich invariants due to the computational locality. By implementing the approximate signature, the noise-sensitive high order derivatives are avoided. The trajectory can then be recognized based on the customized signatures similarity metric. Experiments are conducted to verify the signature's effectiveness and robustness in 3-D trajectory description and recognition.

Short biography:

Youfu Li obtained his PhD degree in robotics from the Department of Engineering Science, University of Oxford in 1993. From 1993 to 1995 he was a postdoctoral research staff in the Department of Computer Science at the University of Wales, Aberystwyth, UK. He joined City University of Hong Kong in 1995 and is currently an associate professor in the Department of Mechanical and Biomedical Engineering. His research interests include robot sensing, sensor guided manipulation, robot vision, 3D vision, visual tracking. He has served as an associate editor of IEEE Transactions on Automation Science and Engineering (T-ASE) and is currently serving as Associate Editor of IEEE Robotics and Automation Magazine (RAM).

Eingeladen von: Prof. Dr.-Ing.habil. Sergej Fatikow

Weitere Kolloquiumstermine sind im WWW abrufbar.