Fakultät II Informatik, Wirtschafts- und
Rechtswissenschaften
Department für Informatik

Informatik Kolloquium

Am **Dienstag, dem 14. Juni 2011,** um **17:00 Uhr** hält

Associate Professor JAY KATUPITIYA
School of mechanical and manufacturing engineering
University of new south wales
Sydney, Australia

einen Vortrag mit dem Titel

Use of v-disparity image for traversable terrain identification

Der Vortrag findet im OFFIS, Escherweg 2, Konferenzraum F02 statt.

Kurzfassung:

Quite often, stereo imaging is used to detect traversable terrain and obstacles for autonomous navigation. This presentation describes a method to estimate the position of the ground plane for navigation of on-road or off-road vehicles. Ground plane estimation plays an important role in stereo vision based obstacle detection. V-disparity image is widely used for ground plane estimation. However, it heavily relies on distinct road features which may not exist. This presentation introduces a global correlation method to extract the position of the ground plane in V-disparity image even when distinct road features are not available.

The existing approach based on V-Disparity image can detect flat ground successfully but have difficulty in detecting non-flat ground. This presentation describes an extension to the theory behind the V-Disparity image to enable it to be successfully used in the presence of both flat and non-flat ground scenarios. The new method is then applied to differentiate between obstacles and traversable flat as well as non-flat ground terrain. A number of results will be presented to prove the validity of the method.

Eingeladen von: Prof. Dr. Sergej Fatikow

Weitere Kolloquiumstermine sind im WWW abrufbar.