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* OBERSEMINAR BILDVERARBEITUNG COMPUTERSEHEN UND COMPUTERGRAPHIK *
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Albert-Ludwigs-Universität Freiburg
Institut für Informatik

Prof. Dr. Thomas Brox
Prof. Dr. Matthias Teschner
apl. Prof. Dr. Olaf Ronneberger

Am Dienstag, 11.07.2017, 14:00, berichtet Herr Denis Tananaev über das Ergebnis seiner Masterarbeit:

Structure from Motion with Recurrent Neural Networks

Abstract:

In this work we develop recurrent convolution neural networks for depth prediction and position estimation given a video sequence from a monocular camera. We compare the performance of 2D and 3D residual convolutional networks with networks that use convolutional LSTM with tanh or leaky ReLU activations. We show the importance of layer normalization for designing non-saturating recurrent networks which are able to process any length of input sequences. Our experiments show that the recurrent networks allow to accumulate the information from all previously observed frames and thereby improve the quality of predictions. Our approach outperforms frame to frame processing by the 2D and 3D convolutional feed-forward networks.

Zeit: Tuesday, 11.07.2017, 14:00 Achtung: Geänderte Zeit und
Ort: Geb. 52, 01-033 anderer Raum!!!

Interessenten sind herzlich eingeladen. Weitere Informationen bei:
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