

Exam, 30% of the total grade

Lecture 2 (Jan van Gemert), lab, and papers (presented by the students) are all (written) exam material. During lecture 2 (Jan van Gemert) and the paper presentations, the most important topics are discussed. These topics form the basis for the (closed book) exam. The (freely downloadable) book <http://szeliski.org/Book/> provides background information. Focus on chapters 4, 6.1, 7-7.7, 11.1-11.4, 12.1, 12.2 of the book. Material of Lecture 2 (Jan van Gemert) is mandatory.

50% of the exam questions will cover the theory on 3D computer vision. This material is covered in lecture 2 and lab assignments.

50% of the exam questions are related to the papers presented during the course. As there are many papers, a paper selection has been made. The selected (8) papers were randomly chosen. You may bring these papers and consult them during the exam. No notes on the papers are allowed.

Accidental Pinhole and Pinspeck Cameras: Revealing the Scene Outside the Picture, Torralba:
<http://people.csail.mit.edu/torralba/publications/shadows.pdf>

Reconstruction and Tracking of Non-rigid Scenes in Real-Time, Newcombe et. al.:
<http://grail.cs.washington.edu/projects/dynamicfusion/papers/DynamicFusion.pdf>

Object Detectors Emerge in Deep Scene CNNs, Bolei et. al.:
http://www.robots.ox.ac.uk/~vgg/rg/papers/zhou_iclr15.pdf

Real-Time Human Pose Recognition in Parts from Single Depth Images, Shotton et al.:
<http://research.microsoft.com/pubs/145347/BodyPartRecognition.pdf>

FlowNet: Learning Optical Flow with Convolutional Networks, Dosovitskiy et al.:
<http://lmb.informatik.uni-freiburg.de/Publications/2015/DFIB15/flownet.pdf>

Recovering Intrinsic Images with a Global Sparsity Prior on Reflectance, Gehler:
<http://people.tuebingen.mpg.de/mkiefel/projects/intrinsic/nips11intrinsic.pdf>

R-FCN: Object Detection via Region-based Fully Convolutional Networks, Dai et al.:
<https://arxiv.org/pdf/1605.06409.pdf>

Matching Local Self-Similarities across Images and Videos, Shechtman, Irani:
http://www.wisdom.weizmann.ac.il/~vision/VideoAnalysis/Demos/SelfSimilarities/SelfSimilarities_ShechtmanIrani07.pdf