Lecture Schedule – tentative

Week/ room	Litteratur	Theme	Lab topic	Other info
34 M: KE E-164 T: AR Ø-130	1., 2.1, 2.2, 2.3,2.4, + 9.1 3.1,3.2	- History, overview - Image Basics - Vision in nature - Image formation - Image aquisition - Modalities, Color - Simple geometric transformation - Gray level Transformation	Pre-lab	Pre-lab setting up the environment
35 M: KE E-164 T: AR Ø-130	3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 ,4.1	- Histograms - Multispectral transformation - Change detection - Compositing - Interpolation - Warping - Morphological operations	Lab1: *Fundamentals*	Deadline Lab 1: 05.09
36 M: AR Ø-130 T: AR Ø-130	5.1,5.2, 5.3, 5.4	- Spatial Domain Filtering, - Convolution - Smoothing, Gaussian kernel - 1st, 2nd derivative kernels	Lab 2: *Image formation*	Deadline Lab 2: 12.09
37 T: AR Ø-130	5.5, 6.1, 6.2	- Nonlinear filters - Image transformation, SVD - Fourier transform No lecture Monday 13th sept No lab assistance 13-14th sept	Lab 3: *Histogram and point transformations*	No deadlines this week ☺
38 M: AR Ø-130 T: AR Ø-130	6.3, 6.4, 6.5,	- Frequency Domain Processing - Discrete fourier transform - 2D DFT - Freq.domain filtering	Lab3/ Lab 4: *Spatial-domain filtering*	Deadline Lab 3: 26.09
39 M: KE E-164 T: AR G-202	7.1, 7.2, 7.3, 7.4, 7.5,13.4	- Edges and features - Gauss/laplace pyramids - Edge detector - Feature detect. (Harris, SIFT) - Feature descriptors - Projective geometry	Lan4 / Lab 5: *Frequency-domain processing*	Deadline Lab 4: 03.10
40 M: AR Ø-130 T: AR Ø-130	13.5, 13.1, 13.2	- Camera calibration - Human stereopsis - Correspondence problem	Labn5 / Lab 6: *Image feature detection*	Deadline Lab 5: 10.10
41 M: AR Ø-110 T: AR Ø-130	13.3, 13.6	- Motion and optical flow - Geometry of multiple views	Lab6 / Lab 7: *Stereo Vision and Camera Calibration*	Deadline Lab 6: 17.10
42 M: AR Ø-130 T: AR Ø-130	10.1, 10.3	- Thresholding - Image Segmentation	Finish lab 7. *+ Bonus lab on segmentation*	Deadline Lab 7: 24.10

43 M: AR Ø-110 T: AR Ø-130	12.4.6, 12.4.10 ++	- Deep learning in Image processing (some topics)	Finish lab 7/8	Deadline Lab 8: 29.10 Project titles published Friday 29nd Oct.
44 M: AR Ø-130		**Project – no lecture** I will be in class Monday, if anyone needs start-help on project. No lectures - Unless possible delays and catching up.	Work on project!	
45		**Project – no lecture** (Unless possible delays and catching up)	Work on project!	Project delivery Sunday 14.11
46 M: AR Ø-130 T: AR Ø-130		- Summary - Previous exams - Q&A	**mandatory oral presentation of projects in lab times, Monday and Tuesday**	