

Lecture References

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Module 0

Lecture 0.0

- None

Lecture 0.1

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<http://graphics.stanford.edu/papers/fcam/>, <http://doi.acm.org/10.1145/1833349.1778766>

Lecture 0.2

- Pradeep Sen, Billy Chen, Gaurav Garg, Stephen R. Marschner, Mark Horowitz, Marc Levoy, and Hendrik P. A. Lensch (2005). "Dual photography". In *ACM Trans. Graph.* 24, 3 (July 2005), 745-755. (DOI=10.1145/1073204.1073257),
https://graphics.stanford.edu/papers/dual_photography/, <http://doi.acm.org/10.1145/1073204.1073257>, Video: http://www.youtube.com/watch?v=p5_tpq5ejFQ

Lecture 0.3 and Lecture 0.4

- None

Module 1

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- Rick Szeliski (2010), [Computer Vision: Algorithms and Applications](#), Springer.

- David Forsyth and Jean Ponce (2011), [Computer Vision: A Modern Approach](#), 2nd edition 2011. Pearson

Module 2

Lecture 2.0, 2.1, 2.2, 2.3

- Eugene Hecht, (2002) [Optics](#) 4th Edition, Pearson
- B. London, J. Stone and J. Upton (2010), Photography, 10th ed. Upper Saddle River, NJ: Prentice Hall.
- [Flash applets on some technical aspects of photography](#)

Module 3

Lecture 3.1, 3.2

- Burt and Adelson (1983) "The Laplacian Pyramid as a Compact Image Code", In IEEE Transactions on Communications, 31 (4). p 532-540. 1983 [PDF](#)
- Burt and Adelson (1983) "A multiresolution spline with application to image mosaics". In ACM Transactions on Graphics, 2 (4). 1983 [PDF](#)

Lecture 3.4

- Davis (1998), "Mosaics of Scenes with Moving Objects" IEEE Computer Vision and Pattern Recognition (CVPR), 1998. [WEBSITE](#)
- Efros and Freeman (2001), "Image Quilting for Texture Synthesis and Transfer" SIGGRAPH 2001 [WEBSITE](#)
- Kwatra, Schödl, Essa, Turk, Bobick (2003), "Graphcut textures: image and video synthesis using graph cuts" SIGGRAPH 2003 [WEBSITE](#)
- Boykov and Jolly (2001), "Interactive Graph Cuts for Optimal Boundary & Region Segmentation of Objects in N-D images". ICCV 2001. [PDF](#)
- Avidan and Shamir (2007), "Seam carving for content-aware image resizing", SIGGRAPH 2007. [WEBSITE](#)
- Agarwala, Dontcheva, Agrawala, Drucker, Colburn, Curless, Salesin, Cohen (2004), "Interactive Digital Photomontage." SIGGRAPH 2004. [WEBSITE](#)

Lecture 3.5

- Harris and Stephens (1988) "A Combined Corner and Edge Detector." Proceedings of the 4th Alvey Vision Conference, 1988 [PDF](#)
- Mikolajczyk and Schmid (2001). "Indexing Based on Scale Invariant Interest Points". ICCV 2001 [PDF](#)
- Lowe (2004) "Distinctive Image Features from Scale-Invariant Keypoints". IJCV 2004 [WEBSITE](#)

Lecture 3.6

- Brown and Lowe (2003). "Recognising Panoramas." International Conference on Computer Vision (ICCV2003) [PDF](#)

Lecture 3.7, 3.8

- Grossberg and Nayar (2003), "Determining the Camera Response from Images: What is Knowable?," IEEE Transactions on Pattern Analysis and Machine Intelligence [PDF](#)
- Debevec and Malik (1997). "Recovering High Dynamic Range Radiance Maps from Photographs." In SIGGRAPH 1997 [PDF](#)
- Ward (2001), "High Dynamic Range Imaging," Proceedings of the Ninth Color Imaging Conference, November 2001. [PDF](#)
- Durand and Dorsey (2002), "Fast Bilateral Filtering for the Display of High-Dynamic-Range Images" In SIGGRAPH 2002. [PDF](#)
- Reinhard, Stark, Shirley and Ferwerda (2002), "Photographic Tone Reproduction for Digital Images", In SIGGRAPH 2002. [WEBSITE](#)
- Banterle, Artusi, Debattista, and Chalmers (2011) Advanced High Dynamic Range Imaging CRC Press. (with Matlab Code) [WEBSITE](#)

Module 4

Lecture 4.0

- Kim, Oh, Lee, and Essa (2009), "Augmenting Aerial Earth Maps with Dynamic Information," in Proceedings of IEEE International Symposium on Mixed and Augmented Reality (ISMAR), 2009. [WEBSITE](#)
- Grundmann, Kwatra, and Essa (2011), "Auto-Directed Video Stabilization with Robust L1 Optimal Camera Paths," In IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2011. [WEBSITE](#)
- Kwatra, Schödl, Essa, Turk, and Bobick (2003), "Graphcut Textures: Image and Video Synthesis Using Graph Cuts," In ACM SIGGRAPH 2003 [WEBSITE](#).

Lecture 4.1, 4.2

- Schödl, Szeliski, Salesin, and Essa (2000), "Video textures," in SIGGRAPH 2000 [WEBSITE](#).
- Kwatra, Schödl, Essa, Turk, and Bobick (2003), "Graphcut Textures: Image and Video Synthesis Using Graph Cuts," In ACM SIGGRAPH 2003 [WEBSITE](#).
- Schödl and Essa (2002), "Controlled animation of video sprites" in ACM SIGGRAPH/Eurographics Symposium on Computer animation 2002. [WEBSITE](#).
- Agarwala, Zheng, Pal, Agrawala, Cohen, Curless, Salesin, and Szeliski (2005) "Panoramic video textures." SIGGRAPH 2005 [PDF](#), [DOI](#)
- Bai, Agarwala, Agrawala, Ramamoorthi (2012), "Selectively De-animating Video," SIGGRAPH 2012 [PDF](#).

Lecture 4.3, 4.4

- Adelson and Bergen (1991), "The Plenoptic Function and the Elements of Early Vision" Computational models of visual processing. [PDF](#)
- Adelson and Wang (1992) "Single lens stereo with a plenoptic camera", IEEE PAMI 14(2) [PDF](#).
- Ng, Levoy, et al. (2005), "Light field photography with a hand-held plenoptic camera" Stanford Tech Report CTSR 2005-02, 2005. [PDF](#).

Closing Lecture

- Grundmann, Kwatra, and Essa (2011), "Auto-Directed Video Stabilization with Robust L1 Optimal Camera Paths," in Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2011. [PDF](#) [WEBSITE](#) [VIDEO](#)
- M. Grundmann, V. Kwatra, D. Castro, and I. Essa (2012), "Calibration-Free Rolling Shutter Removal," in Proceedings of IEEE Conference on Computational Photography (ICCP), 2012. [PDF](#) [WEBSITE](#) [VIDEO](#)

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