Collapse All

- ▼ Online Lecture Room + Office Hour Links

 Lecture and Instructor Office Hours
 (https://canvas.wisc.edu/courses/478888/external_tools/27637)

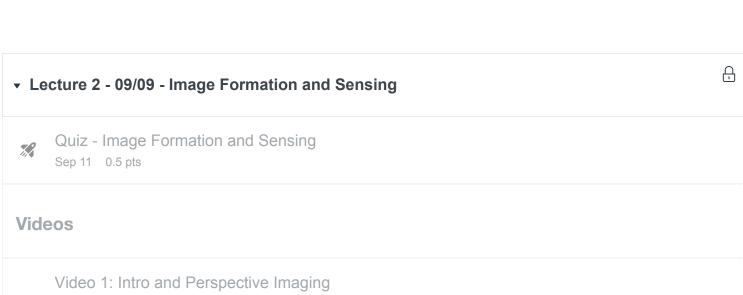
 TA Office Hours (https://canvas.wisc.edu/courses/478888/external_tools/27637)
- Lecture 1 09/04 Introduction and Optical Illusions

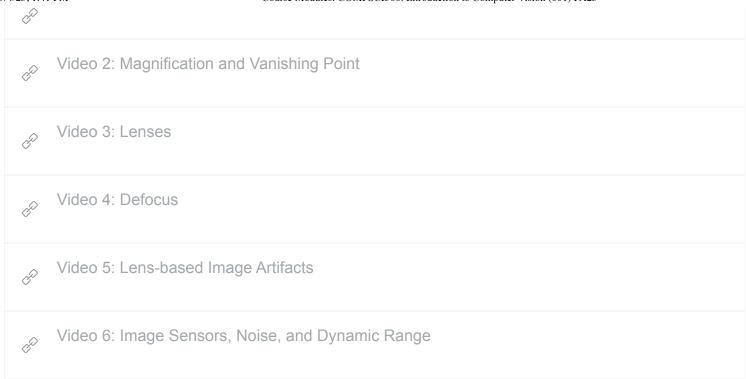
 Quiz Introduction
 Sep 6 0.5 pts

 Slide

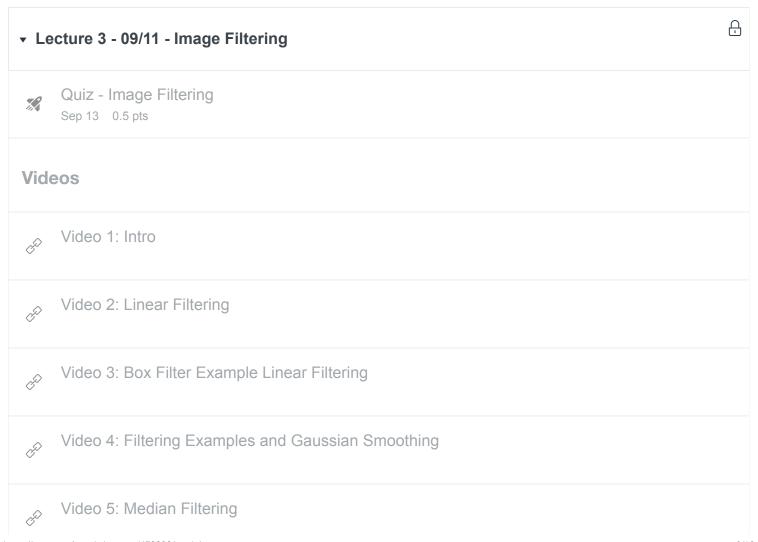
 Lecture 1: Introduction and Optical Illusions

 (https://drive.google.com/file/d/1YegzPtnTO1tYGmy0cHGGi7ICHoNYA6Qq/view?usp=sharing)





Will unlock Sep 8 at 5pm





Video 6: Template Matching

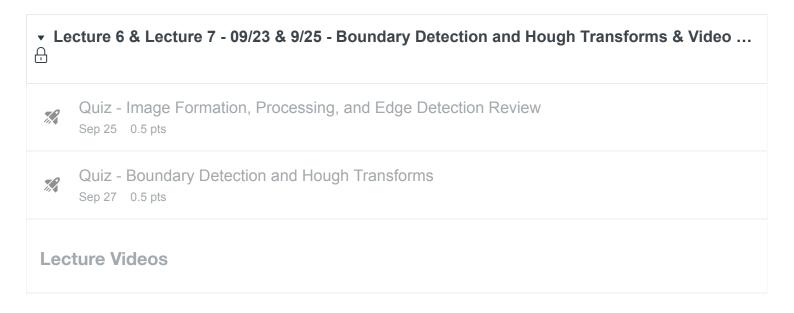
Will unlock Sep 10 at 5pm

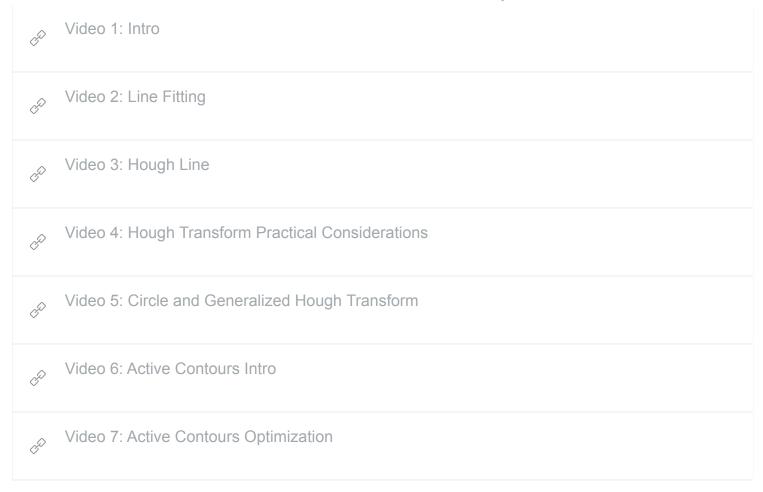
▼ Le	▼ Lecture 4 - 09/16 - Thinking about Images in the Fourier Domain		
×	Quiz -Thinking about Images in the Fourier Domain Sep 18 0.5 pts		
Videos			
¢ [©]	Video 1: Intro to Fourier Transform		
Ç [©]	Video 2: Fourier Transform Examples		
Ç ^D	Video 3: Fourier Transform Properties		
Ç.	Video 4: 2D Fourier Transform Example		
Ç.	Video 5: Filtering in the Fourier Domain		
Ç.	Video 6: Deconvolution		
¢ [©]	Video 7: Sampling		

Will unlock Sep 15 at 5pm

9/4/25, 1:41 PM ▼ Lecture 5 - 09/18 - Edge and Corner Detection Quiz - Edge and Corner Detection Sep 20 0.5 pts **Videos** Video 1: Intro Video 2: Theory of Gradient Edge Detector Video 3: Discrete Gradient Operator Video 4: Laplacian and Noise Suppression Video 5: Canny Edge Detector Video 6: Harris Corner Detection

Will unlock Sep 17 at 5pm





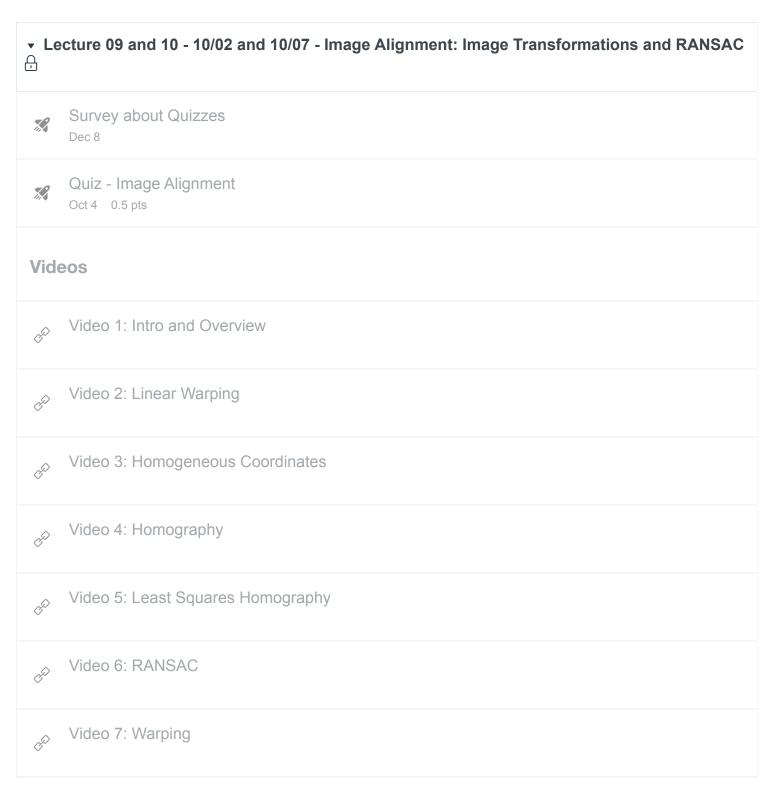
Will unlock Sep 22 at 5pm

Videos ✓ Video 1: Intro to Image Matching ✓ Video2: 1D Blob Detection ✓ Video 3: 2D Blob Detection ✓ Video 4: Scale Space Analysis





Will unlock Sep 29 at 5pm





Video 8: Blending

Will unlock Oct 1 at 5pm

▼ Le	ecture 11 - 10/09 - Face Detection with Support Vector Machines	\bigcirc	
***	Quiz - Face Detection and SVM Oct 14 0.5 pts		
Videos			
¢ P	Video 1: Intro to Face Detection		
¢ P	Video 2: Haar Features		
¢ P	Video 3: Integral Images		
¢ P	Video 4: Nearest Neighbor Classifier		
¢ P	Video 5: Linear Decision Boundaries		
¢ P	Video 6: Support Vector Machines		

Will unlock Oct 8 at 5pm

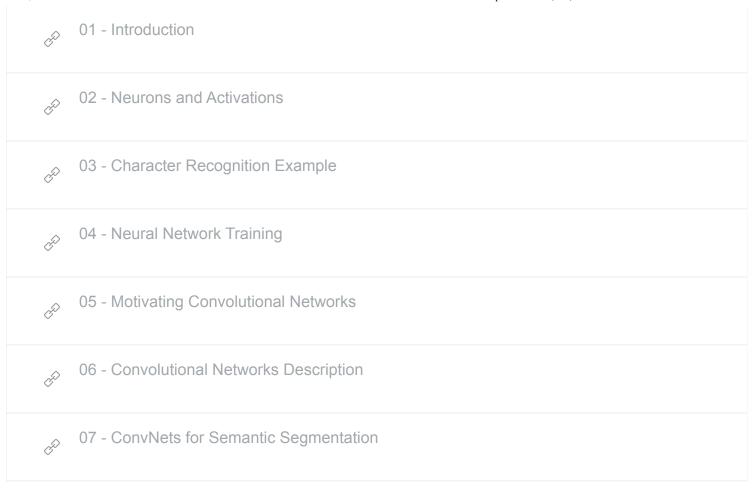
▼ Lecture 12 - 10/14 - Image Segmentation with k-Means Clustering and Mean-Shift



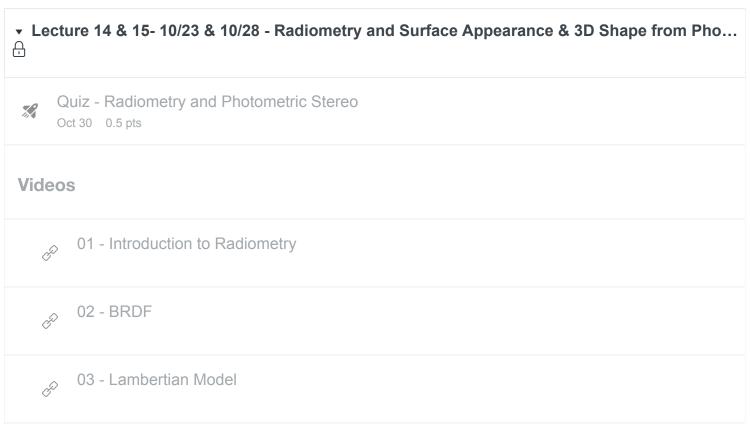
No Quiz for this Lecture **Videos** Video 1: Intro Video 2: Clustering Video 3: K-Means Clustering Video 4: K Means Segmentation Video 5: Mean Shift Clustering Video 6: Mean Shift Segmentation Video 7: Graph Cut Segmentation Video 8: Normalized Cut Segmentation

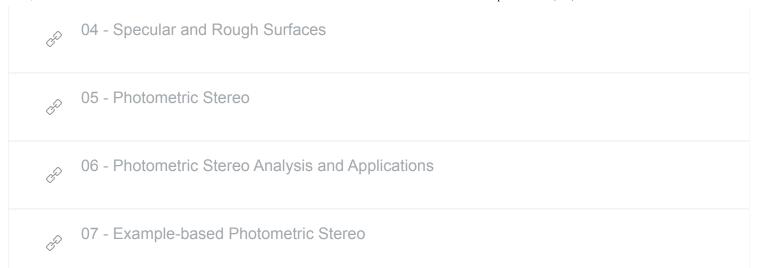
Will unlock Oct 13 at 5pm

Lecture 13 - 10/16 - Introduction to Neural Networks and Convolutional Neural Networks Quiz - Introduction to Neural Networks Oct 21 0.5 pts Videos

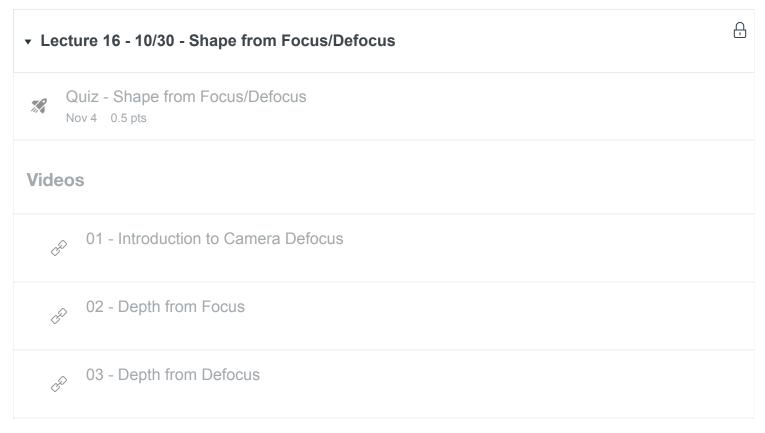


Will unlock Oct 15 at 5pm





Will unlock Oct 22 at 5pm



Will unlock Oct 29 at 5pm

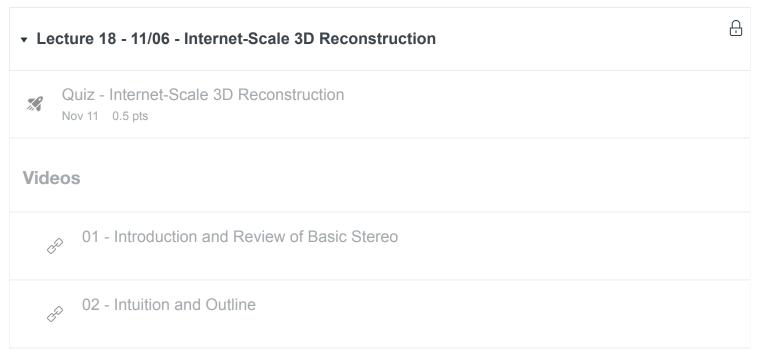
▼ Lecture 17 - 11/04 - Camera Calibration and Shape from Stereo

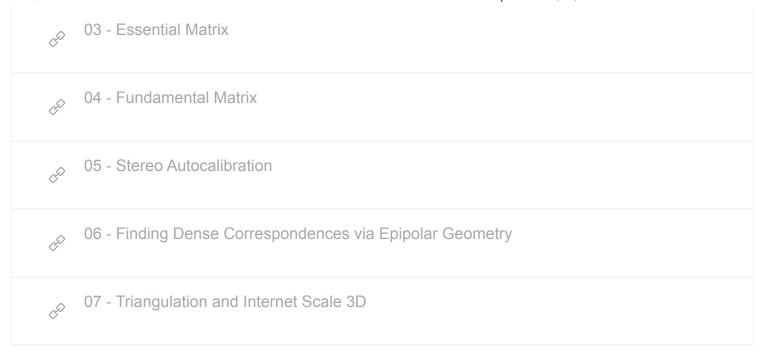


Quiz - Camera Calibration and Simple Stereo
Nov 11 0.5 pts

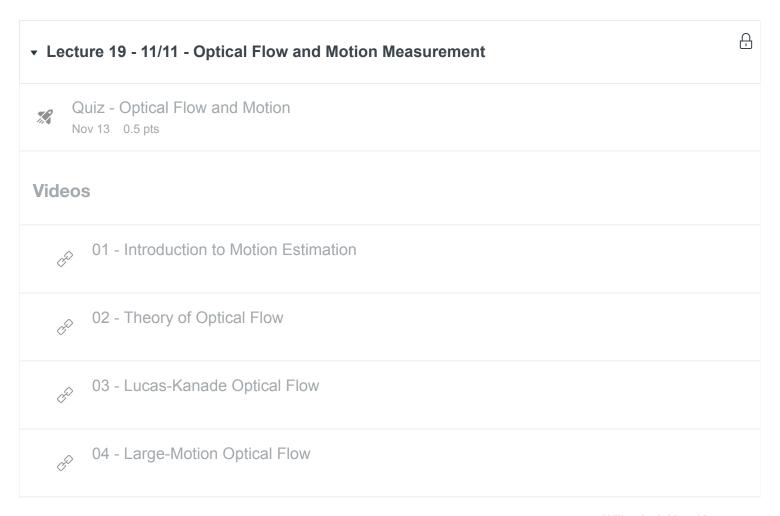
Videos 01 - Introduction to Depth from Stereo 02 - Intrinsic Camera Matrix 03 - Extrinsic Camera Matrix 04 - Camera Calibration 05 - Recovering Extrinsic and Intrinsic Matrices 06 - Triangulation 07 - Finding Correspondences

Will unlock Nov 3 at 5pm

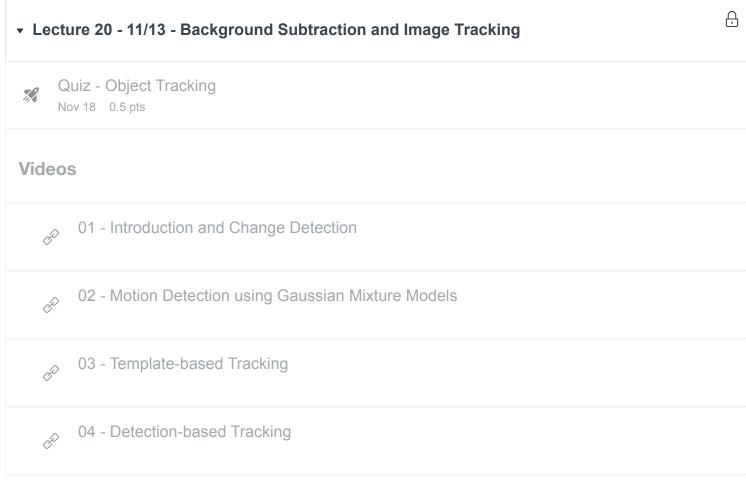




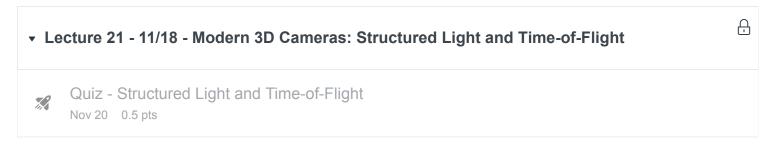
Will unlock Nov 5 at 5pm



Will unlock Nov 10 at 5pm



Will unlock Nov 12 at 5pm



Will unlock Nov 17 at 5pm

▼ Lecture 22 - 11/20 - Advanced Topics: Computational Cameras

Will unlock Nov 20 at 12am