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)		
Quiz - Introduction Sep 6 0.5 pts		
HW1 Sep 16 5 pts		
Slide		
Lecture 1: Introduction and Optical Illusions ☐⇒ (https://drive.google.com/file/d/1YegzPtnTO1tYGmy0cHGGi7ICHoNYA6Qq/view?usp=sharing)		
▼ Lecture 2 - 09/09 - Image Formation and Sensing		

https://canvas.wisc.edu/courses/478888/modules

Sep 11 0.5 pts

Quiz - Image Formation and Sensing

9/14/25, 1:31 PM Course Modules: COMPSCI566: Introduction to Computer Vision (001) FA25 **Videos** Video 1: Intro and Perspective Imaging ⇒ (https://drive.google.com/file/d/1py9JP2ckzJsSO9aZmQH9AoauEPsmFFdX/view? B usp=sharing) Video 2: Magnification and Vanishing Point □ (https://drive.google.com/file/d/1n2eW733G-YhODvgRDXiv-sJaiogxRRLJ/view?usp=sharing) Video 3: Lenses ; (https://drive.google.com/file/d/1-R qDzgspwc5 YCgjsi0V4NzeJt35wFO/view?usp=sharing) Video 4: Defocus □→ (https://drive.google.com/file/d/1gKStcg48QBy4OaEYU9oq6MyTEAdvJiEb/view?usp=sharing) Video 5: Lens-based Image Artifacts ⇒ (https://drive.google.com/file/d/1aJnEWKtnKHyTBjeR-UAbg76kTegQjHWD/view?usp=sharing) (https://drive.google.com/file/d/1z4V4iFkacDUbOYx8i0gouQLcW1oN3XgM/view?usp=sharing)

Slide

Lecture 2: Image Formation and Sensing □ (https://drive.google.com/file/d/19ROy1qZgFq9nQPu3PMMmTGIXiT7iOEPm/view? usp=sharing)

▼ Lecture 3 - 09/11 - Image Filtering



Quiz - Image Filtering

Sep 13 0.5 pts

Videos



Video 1: Intro □

(https://drive.google.com/file/d/1IQVt0OEUUqeVjpfgRNeyjG_6j64UW52N/view?usp=sharing)



Video 2: Linear Filtering □

(https://drive.google.com/file/d/1kD7dDewYppHI3y4Q9sGjGSrtfApzgJjl/view?usp=sharing)



(https://drive.google.com/file/d/1dH3nDw_a6DW6S66PoGRSIK22Of7uo2t8/view?usp=sharing)



Video 4: Filtering Examples and Gaussian Smoothing □

(https://drive.google.com/file/d/1Fu8mF9MQ2amubzK60FO_G_hU0NEiJE71/view?usp=sharing)



Video 5: Median Filtering_ ⇒

(https://drive.google.com/file/d/1HEPGwRIk2HYCw11ybZmXdRMBLGgTXv8A/view?usp=sharing)

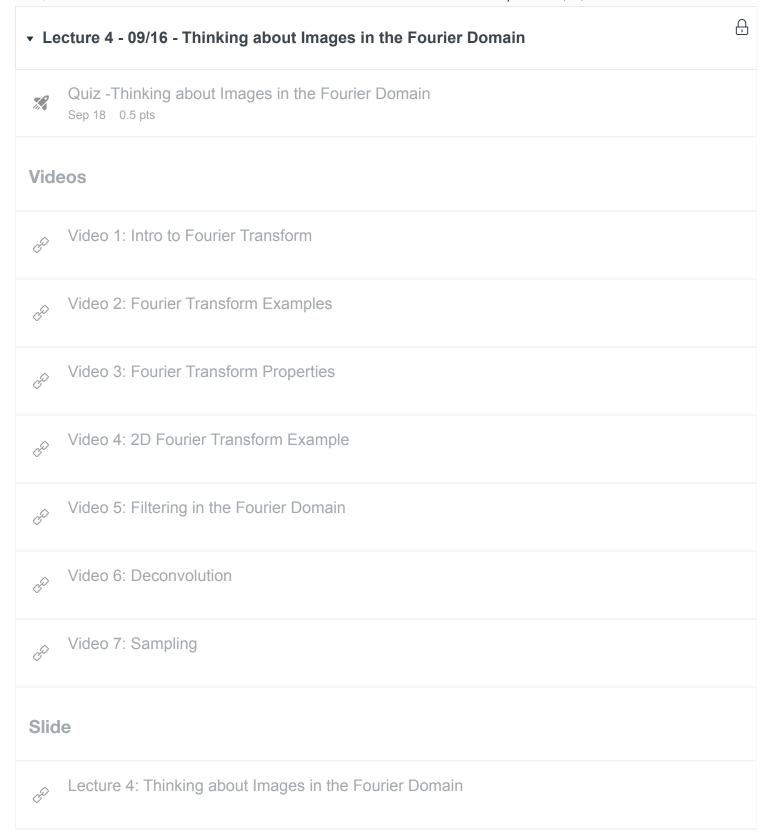


Slide



Lecture 3: Image Filtering □

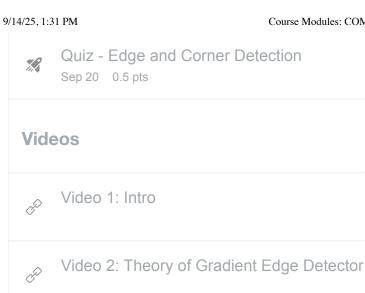
(https://drive.google.com/file/d/10Sstb1q2z80PvUyH iZhYXil vPLh8he/view?usp=sharing)



Will unlock Sep 15 at 5pm

▼ Lecture 5 - 09/18 - Edge and Corner Detection





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

▼ Lecture 6 & Lecture 7 - 09/23 & 9/25 - Boundary Detection and Hough Transforms & Video ...

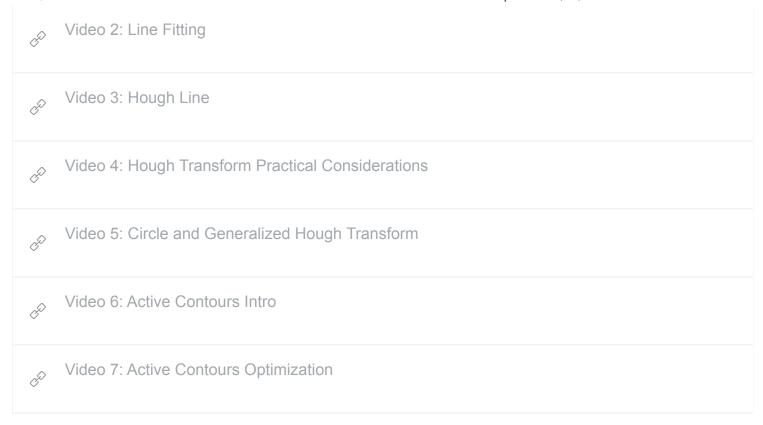
Quiz - Image Formation, Processing, and Edge Detection Review X^2 Sep 25 0.5 pts

Quiz - Boundary Detection and Hough Transforms Sep 27 0.5 pts

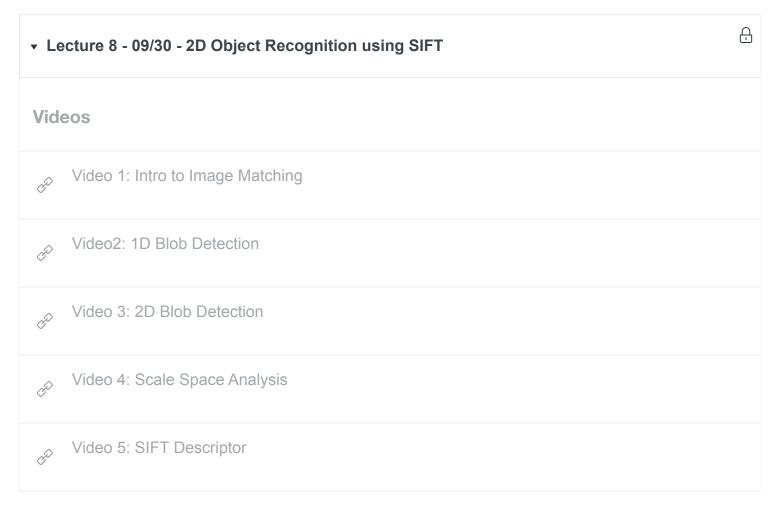
Lecture Videos

X2

Video 1: Intro



Will unlock Sep 22 at 5pm





Video 6: SIFT Examples and Active Contours

Will unlock Sep 29 at 5pm

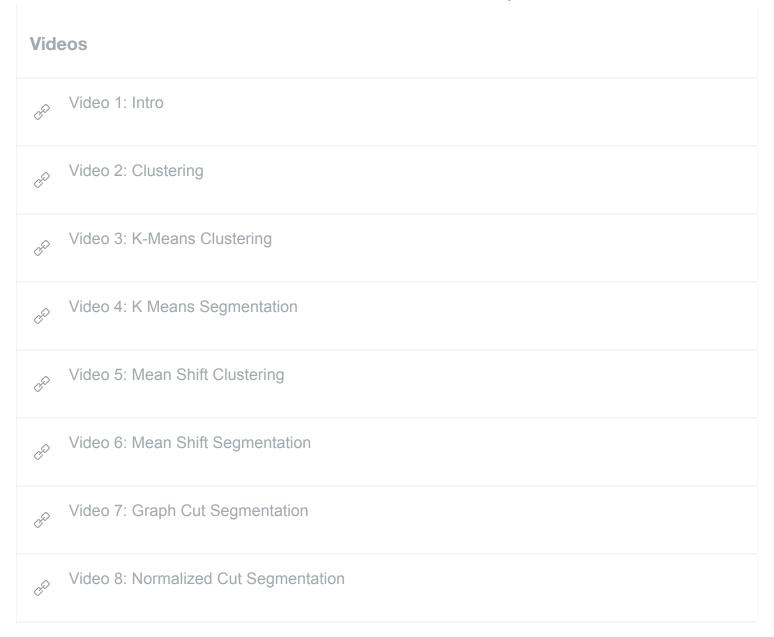
 Lecture 09 and 10 - 10/02 and 10/07 - Image Alignment: Image Transformations and RANSAC □ 				
**	Survey about Quizzes Dec 8			
×	Quiz - Image Alignment Oct 4 0.5 pts			
Videos				
É	Video 1: Intro and Overview			
¢ ²	Video 2: Linear Warping			
¢ [©]	Video 3: Homogeneous Coordinates			
¢ [©]	Video 4: Homography			
¢ ²	Video 5: Least Squares Homography			
ÇÎ	Video 6: RANSAC			
ÇÎ	Video 7: Warping			
Ç.	Video 8: Blending			

Will unlock Oct 1 at 5pm

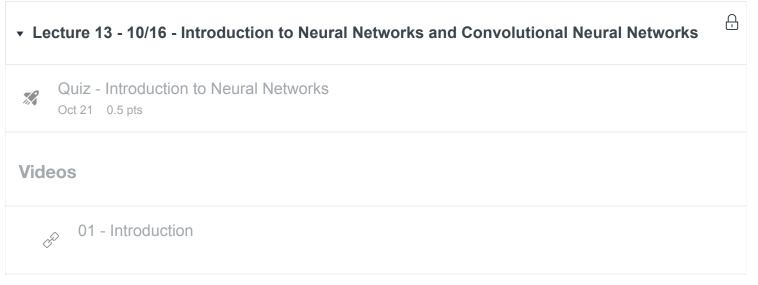
▼ Le	ecture 11 - 10/09 - Face Detection with Support Vector Machines	<u> </u>		
	Quiz - Face Detection and SVM Oct 14 0.5 pts			
Videos				
Ġ	Video 1: Intro to Face Detection			
G ^D	Video 2: Haar Features			
Ç.	Video 3: Integral Images			
GD.	Video 4: Nearest Neighbor Classifier			
Ç.	Video 5: Linear Decision Boundaries			
ÇÊ	Video 6: Support Vector Machines			

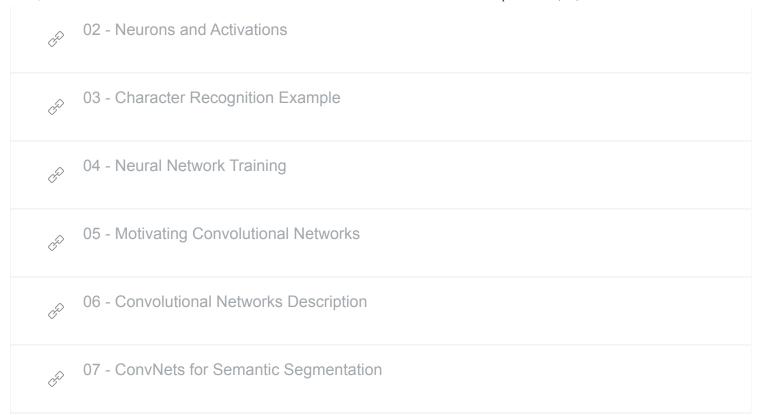
Will unlock Oct 8 at 5pm

Lecture 12 - 10/14 - Image Segmentation with k-Means Clustering and Mean-Shift
 No Quiz for this Lecture

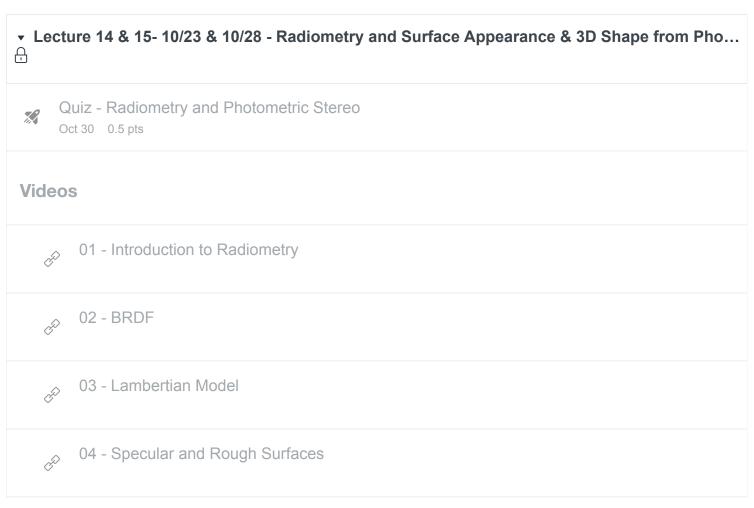


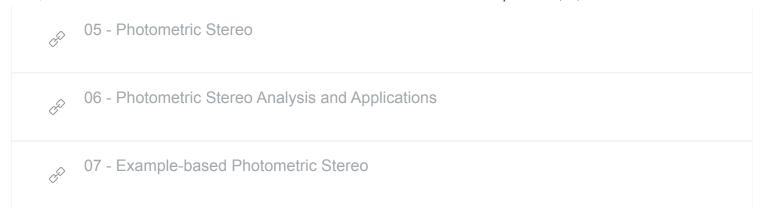
Will unlock Oct 13 at 5pm



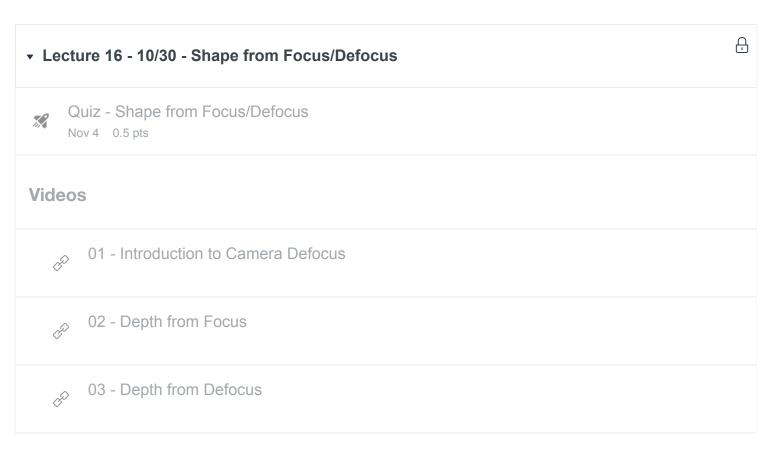


Will unlock Oct 15 at 5pm

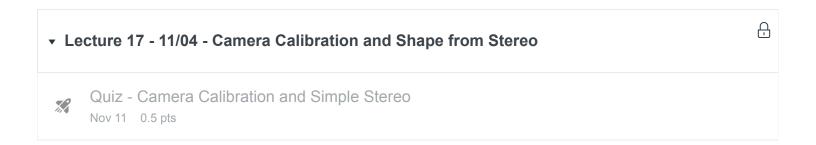




Will unlock Oct 22 at 5pm

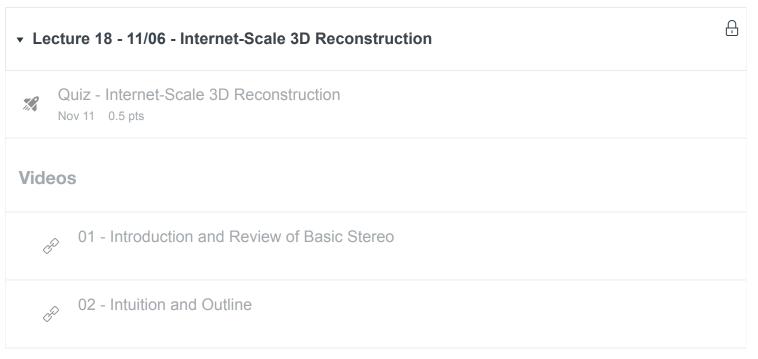


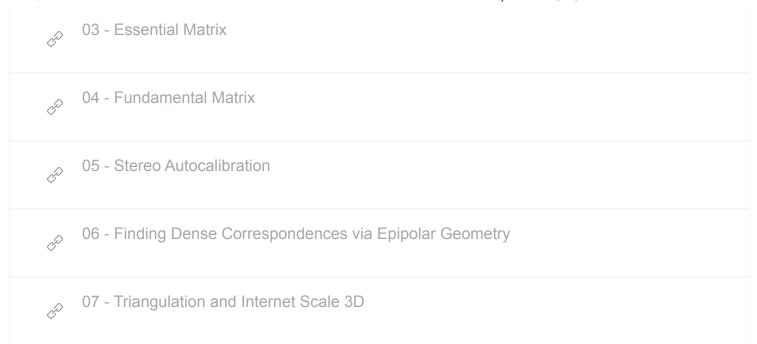
Will unlock Oct 29 at 5pm



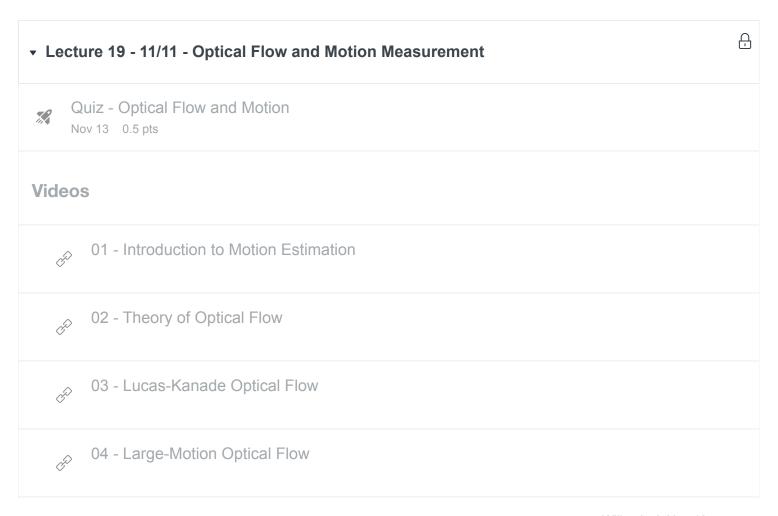
Videos 01 - Introduction to Depth from Stereo 02 - Intrinsic Camera Matrix 03 - Extrinsic Camera Matrix 04 - Camera Calibration 05 - Recovering Extrinsic and Intrinsic Matrices 06 - Triangulation 07 - Finding Correspondences

Will unlock Nov 3 at 5pm

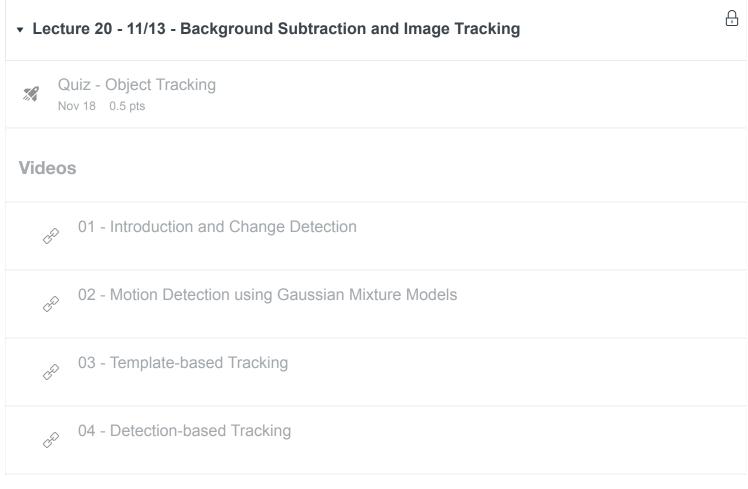




Will unlock Nov 5 at 5pm



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