

CS 6475: COMPUTATIONAL PHOTOGRAPHY
 GEORGIA INSTITUTE OF TECHNOLOGY

SCHEDULE

Week #	Week Beginning	Description	Lecture	DUE (at 5pm Eastern Time -- i.e., Atlanta time -- on Monday of each week)	Peer Feedback DUE at 5pm Eastern Time (See Peer Feedback Piazza Posts for exact date).	Exercises (Notebooks)	Readings (see Materials Sheet)
NOTE: The following is subject to slight modifications over the course of the term. Announcements will be made on PIAZZA							
1	8/19/2019	Introduction	01-01, 01-02, 01-03, 01-04, 01-05				Szeliski Book Chapter 1 (skim), Chapter 2 (Section 2.2 and 2.3)
2	8/26/2019	Digital Imaging I	02-01, 02-02, 02-03, 02-04, 02-05, 02-06, 02-07	A0 - Course Setup		Image Processing for Computational Photography	Szeliski Book Chapter 3 (Sections 3.1 - 3.6)
3	9/2/2019	Digital Imaging II		A1 - Epsilon Photography Plagiarism Quiz (See Piazza for exact due date)			Optional: Harris and Stephens (1988)
4	9/9/2019	Cameras	03-01, 03-02, 03-03, 03-04	Notebook Quiz 1	A1 - Epsilon Photography		Beier and Neely (1992) Raskar (2009)
5	9/16/2019	Merging & Blending Images	04-01, 04-02, 04-03, 04-04	A2 - Camera Obscura			Burt and Adelson (1983a) Burt and Adelson (1983b) Efros and Freeman (2001) Kwatra, Schödl, Essa, Turk, Bobick (2003) Optional: Avidan and Shamir (2007) Boykov and Jolly (2001) Smith (1998)
6	9/23/2019	Feature Detection / Matching	04-05, 04-06	A3 - Image Blending	A2 - Camera Obscura		Optional: Lowe (2004) Mikolajczyk and Schmid (2001)
7	9/30/2019	Image Transformation / Morphing, Stereo	05-01, 05-02, 05-05		A3 - Image Blending	Image Frequency Spectra	Optional: Banerjee (2011) Brown and Lowe (2003) Debevec and Malik (1997) Durand and Dorsey (2002) Grossberg and Nayar (2003) Kushal (2012) Reinhard (2002) Snavely (2010) Snavely, Seltz, Szeliski (2006) Snavely, Seltz, Szeliski (2007) Ward (2001)
8	10/7/2019	Panoramas, HDR, Photo Synth	05-03, 05-04, 05-06	Midterm Research Project			
9	10/14/2019	Camera Calibration	05-07, 05-08, 05-09	Notebook Quiz 2	Midterm Research Project		
10	10/21/2019	Video, Video Stabilization	06-01, 06-02,	A4 - Panoramas			Optional: Agarwala (2005) Grundmann, Kwatra, and Essa (2011) Schödl (2000) Schödl and Essa (2002)
11	10/28/2019	Video Panoramas, Projector Camera Systems	06-03, 06-04		A4 - Panoramas	Keypoints, Features, & Applications	Optional: Bai (2012) Baker (2010) Forsssén, & Ringaby (2010) Grundmann, Kwatra, Castro, and Essa (2012)
12	11/4/2019	Computational Cameras	07-01, 07-02, 07-03	A5 - HDR			Optional: Levoy and Hanrahan (1996) Levin (2007) Ng (2005)
13	11/11/2019	Additional Readings	08-01, 08-02	A6 - Video Textures & Final Project Proposal	A5 - HDR		See Piazza Posts
14	11/18/2019	Additional Readings	08-03, 08-04	Notebook Quiz 3	A6 - Video Textures		See Piazza Posts
15	11/25/2019	Additional Readings	08-05, 08-06				See Piazza Posts
16	12/2/2019	Review Period		Final Project			
17		FINALS WEEK	All Material to Date	Final Exam - exact dates will be announced on Piazza/Canvas	Final Project		EXAM will be Cumulative (Will be available for 1 week and will be ONLINE)
18	12/9/2019			Final Portfolio			That's all, Folks!