ICS 686: Digital Video Information

University of Hawaii Department of Information & Computer Sciences Spring 2010 | Tuesdays 3-5:40 pm | 318A POST Instructor: Rich Gazan (gazan@hawaii.edu | 314B POST | office hours by appt.)

Description

Digital video information is being produced, distributed and consumed at an accelerating pace throughout the world. The goal of this course is to analyze how the medium of digital video influences the information communicated through it. Topics include visual culture, software tools, how sequencing, narrative structure and juxtaposition of multimedia elements influence information perception, how popular culture images are created and perpetuated via digital video, and implications for people's interactions with information systems and services.

Prerequisites

Graduate standing, consent of instructor. Though no assumptions are made about students' prior level of expertise with digital video, being comfortable with locating and sharing resources, improvising and learning new technologies on the fly is essential.

Learning outcomes

Throughout this course, you will:

- Evaluate and critically analyze multimedia content
- Understand video analysis software tools and strategies
- Understand the impact of recorded images and diverse delivery channels on individual and popular opinion
- Create several short digital movies

Teaching method and philosophy

This course combines lecture, lab and studio components. Active participation is critical. You are expected to attend every class meeting, participate knowledgeably, initiate discussions and contribute to existing discussions, and contribute to an environment where all students are encouraged to participate.

In addition to class meetings, you are expected to spend considerable time on your own searching and evaluating multimedia content, and working with digital video creation hardware and software.

The current Roxio digital video editing suite is installed in the ICS labs in both POST 318A and POST 319, though you are free to use other software to complete your projects. POST 318A has computers at every seat, but you are encouraged to bring your own laptop to class. You are required to provide your own flash drive(s) for media storage and backup, and headphones for use in the lab.

Course schedule (subject to change)

Week	Topic	Readings
1	Introduction and overview	Ivey & Tepper
1/12		Kruitbosch et al.
2	Images and icons	Barry
1/19	Guest speaker: Joan C. Nordbotten, University of	McCloud
	Bergen: Context-Aware Image Management	Salvato
3	Visualization and storyboarding	Whitaker
1/26		Zettl
4	Structural video analysis	Turner & Colinet
2/2		Zhu et al
		Hong et al
		Cherubini et al.
5	Genre, narrative and engagement	Soleymani et al
2/9		Ghamari-Tabrizi
6	Association and persuasion	Fuery & Fuery
2/16		Sturken, ch. 6
7	Open mic session	
2/23		
8	Television and social video	Oumard
3/1		Geerts & De Grooff
9	Video-based communities	Biel & Gatica-Perez
3/8		Benevenuto et al.
		Wickett
10	Storyboard presentations	
3/15		
11	Spring Break—no class meeting	
3/22		
12	Distribution channels	Saxena et al.
3/29	Midterm due	Creative Commons
		Independent TV
		Service
13	Ethics and implications	Carlson
4/5		Schewe
		Sturken, ch. 8
14	Rough cut presentations	
4/12		
15	Lab session: Edit final projects	
4/19	Astrophistony Coise as Court	
16	Astrobiology Science Conference—no class meeting	
4/26		
17	Screening of final projects	
5/4	Final movie file due	
	Reflective paper due	

Readings

- Barry, Ann Marie Seward (1997). Visual Intelligence: Perception, Image, and Manipulation in Visual Communication. Albany, NY: State University of New York Press, 69-103.
- Benevenuto, F., et al. (2008). Understanding Video Interactions in YouTube. Proceedings of ACM MM'08, 26-31 October 2008, Vancouver, BC, Canada, 761-764.
- Biel, Joan-Isaac and Daniel Gatica-Perez (2009). Wearing a YouTube Hat: Directors, Comedians, Gurus and User-Aggregated Behavior. Proceedings of ACM MM'09, 19-24 October 2009, Beijing, China, 833-836.
- Carlson, Scott (2007). On the Record, All the Time. The Chronicle of Higher Education 53(23), A30.
- Cherubini, Mauro, Rodrigo de Oliviera and Nuria Oliver (2009). Understanding Near-Duplicate Videos: A User-Centric Approach. Proceedings of ACM MM'09, 19-24 October 2009, Beijing, China, 35-44.
- Creative Commons (2007) http://creativecommons.org/
- Fuery, Patrick and Kelli Fuery (2003). Visual Cultures and Critical Theory. London: Arnold, 109-128.
- Geerts, David and Dirk De Grooff (2009). Supporting the Social Uses of Television: Sociability Heuristics for Social TV. Proceedings of ACM CHI, 4-9 April 2009, Boston, MA, 595-604.
- Ghamari-Tabrizi, Sharon (2004). The Convergence of the Pentagon and Hollywood: The Next Generation of Military Training Simulations. In Lauren Rabinovitz and Abraham Geil, eds., Memory Bytes: History, Technology and Digital Culture. Durham, NC: Duke University Press, 150-173.
- Hong, Richang, et al. (2009). Event Driven Summarization for Web Videos. Proceedings of ACM WSM'09, 23 October 2009, Beijing, China, 43-48.
- Independent Television Service (2007). http://www.itvs.org
- Ivey, Bill, and Steven J. Tepper (2006). Cultural Renaissance or Cultural Divide? The Chronicle of Higher Education 52(37)
- Kruitbosch, Gijs, and Frank Nack (2008). Broadcast Yourself on YouTube—Really? Proceedings of ACM HCC'08, 31 October 2008, Vancouver, BC, Canada, 7-10.
- McCloud, Scott (1994). Understanding Comics: The Invisible Art. New York: Harper Perennial, 24-59.
- Oumard, Marieke, et al. (2008). A Cultural Probes Study on Video Sharing and Social Communication on the Internet. Proceedings of ACM DIMEA, 10-12 September 2008, Athens, Greece, 142-148.
- Salvato, Nick (2009). Out of Hand: YouTube Amateurs and Professionals. TDR: The Drama Review 53:3.

- Saxena, Mohit, Umang Sharan and Sonia Fahmy (2008). Analyzing Video Services in Web 2.0: A Global Perspective. Proceedings of ACM NOSSDAV 2008, Braunschweig, Germany, 39-44.
- Schewe, Jeff (2005). Kate Doesn't Like Photoshop—Digital Ethics. http://photoshopnews.com/2005/04/03/kate-doesnt-like-photoshop/
- Soleymani, Mohammad, et al. (2008). Affective Ranking of Movie Scenes Using Physiological Signals and Content Analysis. Proceedings of ACM MS'08, 31 October 2008, Vancouver, BC, Canada, 32-39.
- Sturken, Marita and Lisa Cartwright (2001). Practices of Looking: An Introduction to Visual Culture. London: Oxford University Press.
 - Ch. 6: Consumer culture and the manufacturing of desire
 - Ch. 8: Scientific looking, looking at science
- Turner, James M., & Emmanuel Colinet (2005). Using Shooting Scripts for Indexing Moving Images. The Moving Image 5.1, 27-44.
- Whitaker, Rod (1970). The Language of Film. Englewood Cliffs, NJ: Prentice-Hall, 31-66.
- Wickett, Elizabeth (2007). Video as Critique, Praxis and Process. Visual Anthropology Review, 23(1), 69-75.
- Zettl, Herbert (1999; 3rd ed.) Sight, Sound, Motion: Applied Media Aesthetics. Belmont, CA: Wadsworth, 182-205.
- Zhu, Guangyu, et al. (2009). Detecting Video Events Based on Action Recognition in Complex Scenes Using Spatio_Temporal Descriptor. Proceedings of ACM MM'09, 19-24 October 2009, Beijing, China, 165-174.

Assignments

Exercises and participation (20%)

This is a small-enrollment lecture/studio course, and attendance and active participation are essential. In addition to fulfilling the participation requirements detailed in the Teaching method and philosophy section of this syllabus, there will be several exercises in which you will be asked to find, create and discuss digital video. Most of the exercises will take place early in the course, to familiarize you with the mechanics of digital video creation and to provide an opportunity for you to demonstrate your ability to understand and apply concepts from readings and lectures. The exercises will require work both inside and outside of class. Though these initial exercises will not be graded, all are required and must be completed for you to pass the course.

Open mic session (20%)

In Week 7, give a brief (10-15 minute) presentation on a topic of your choice related to digital video, and lead a class discussion on the topic for another 10-15 minutes. Your topic need not be related to the week's readings, and you are encouraged to be as creative as you like with the format of the presentation and discussion. Your open mic presentation will be judged along two dimensions: that it be informative and engaging. Post your presentation to the course Website.

Midterm (20%)

At the end of class in Week 10, you will receive a midterm exam covering topics from the first part of the course. Return the completed midterm via a Word or pdf email attachment to me by the beginning of class on Week 12.

Term project (40% total)

Create a short (~5 minutes) digital movie. Though the subject matter, genre and style are open, your movie **must** demonstrate your mastery of the concepts covered in the course. The three components:

Storyboard (5%) Due Week 10

Using no more than 10 still images (PowerPoint slides are fine), create a rough outline of your movie. No more than two of the images/slides may contain text. Your goal is to communicate in an impressionistic manner the tone, style and subject matter of your movie.

Rough cut presentation (5%) Due Week 14

Present the current rough cut of your movie to the class. Prepare two questions for the class about specific elements of your movie.

Final cut and reflective paper (30%) Due Week 17

In the last class meeting we will screen all the final projects. Hand in your finished movie at least two days prior to the screening date, and a 5-page paper describing your experience with the project and the course. Though the tone of the paper is informal, link your thoughts explicitly to course concepts.