

CMS.S62/CMS.S98 – Special Topic (Spring 2018):

## Digital Humanities II: Data, Archives, Interfaces

Wednesdays, 7-10 PM, Room 16-644

### Instructor:

Kurt Fendt, Room 16-635, office hours W 4-5 PM or by appointment, email: fendt@mit.edu

### TA:

Rachel Thompson, email: rachelpt@mit.edu

Investigates theory and practice of transforming, curating, and communicating humanities content as data using computational and design methods. Develops an understanding of advanced digital humanities concepts including data curation, dynamic digital archives, information visualization, and user interaction through the study of contemporary research in conjunction with developing collaborative real-world projects for diverse audiences. Students create prototypes, write design papers, and conduct user studies. Students taking graduate version complete additional assignments.

### Format and Requirements

This course will consist of reading discussions, demonstrations of tools and techniques, hands-on project work time, collaboration on a final class project with students and faculty at the Potsdam University of Applied Sciences' (FH Potsdam) Interaction Design Lab and Urban Complexity Lab. In addition, guest speakers who work in museums, archives, libraries, and design labs will discuss their work in class or at site visits. Students are expected to participate in class discussions on readings, project presentations, and review sessions. Students will annotate readings using the tool Annotation Studio and contribute reading comments as well as project updates on the course's GitHub site. Small teams will be formed to work on a range of smaller projects throughout the semester. The final project will be selected at the beginning of the semester in close collaboration with the student teams in Germany and will have to be completed by the end of the term.

Grades will be based on the following criteria:

- Final project (40%), including design paper and prototype
- Short projects (15%)
- Presentations and project updates (15%)
- Class participation (15%)
- Annotation Studio and Github contributions (15%)

Class attendance is required. Unexcused absences result in a lower grade. There will be no final exam in the class.

Avoid *plagiarizing*. **Plagiarism** is the use of another's intellectual work without acknowledgment. Full acknowledgment for all information obtained from sources outside the classroom must be clearly stated in all written work submitted. All ideas, arguments, and direct phrasings taken from someone else's work must be identified and properly footnoted. Use quotation marks to identify all sources of wording that are not yours. Identify sources of ideas with appropriate footnoting. Plagiarism receives an F in the subject, the instructor is required to forward the case to the Committee on Discipline. See <http://cmsw.mit.edu/writing-and-communication-center/avoiding-plagiarism/> for more information.

The WCC at MIT (**Writing and Communication Center**) offers *free* one-on-one professional advice from communication experts. The WCC is staffed completely by MIT lecturers. All have advanced degrees. All are

experienced college classroom teachers of communication. All are published scholars and writers. Not counting the WCC's director's years (he started the WCC in 1982), the WCC lecturers have a combined 134 years' worth of teaching here at MIT (ranging from 4 to 24 years), so they are intimately familiar with MIT culture and with the academic and professional expectations of all fields. The WCC works with undergraduate, graduate students, post-docs, faculty, staff, alums, spouses and partners. The WCC helps you strategize about all types of academic and professional writing (dissertations, theses, papers for courses, proposals, articles for publication, job applications and CVs) as well as about all aspects of oral presentations (including practicing classroom presentations & conference talks, and designing slides). No matter what department or discipline you are in, the WCC helps you think your way more deeply into your topic, helps you see new implications in your data, research, and ideas. The WCC also helps with all English as Second Language issues, from writing and grammar to pronunciation and conversation practice. The WCC is located in E18-233, 50 Ames Street). To guarantee yourself a time, please make an appointment. To register with our online scheduler and to make appointments, go to <https://mit.mywconline.com/> . To access the WCC's many pages of advice about writing and oral presentations, go to <http://cmsw.mit.edu/writing-and-communication-center/> . Check the online scheduler for up-to-date hours and available appointments.

### HyperStudio at MIT

This class is offered by members of MIT's HyperStudio – Center for Digital Humanities, one of the research groups within Comparative Media Studies/Writing. HyperStudio explores the potential of new media technologies for the enhancement of education and research in the humanities. HyperStudio's work focuses on questions about the integration of technology into humanities curricula within the broader context of scholarly inquiry and educational practice. HyperStudio conceptualizes, develops, and deploys innovative media applications in close collaboration with scholars, educators, students, and developers.

### Syllabus

Week	Topic, Readings, Assignments
Week 1 February 7	<b>From Humanities Content to Humanities Data, Introduction</b> <i>Lit.</i> Anne Burdick et al., <i>Digital Humanities</i> (Cambridge and London: MIT Press, 2012), pgs 124-125; 130-131; 12-22. Graduate students also read pgs 3-26. <i>Activity:</i> Evaluation of cultural heritage archives
Week 2 February 14	<b>Digital Archives I: Theories and Emerging Formats</b> <i>Lit.</i> Wolfgang Ernst, <i>Digital Memory and the Archive</i> (Minneapolis and London: University of Minnesota Press, 2012), pgs 1-3; 95-101; 47-49. Graduate students also read pgs 147-157. <u><a href="#">Verge article on Guatemalan Archives</a></u> <i>Activity:</i> Criteria for rethinking digital archives, initial selection of archives for final project
Week 3 February 21	<b>Visualizing Data I: Spatial &amp; Temporal Mapping, Guest Speaker (Jeremy Grubman, ACT)</b> <i>Lit.</i> Johanna Drucker, <i>Graphesis: Visual Forms of Knowledge Production</i> (Cambridge, MA and London: Harvard University Press, no year), pgs i-ix; 125-129. Graduate students also read pgs 64-84. Anne Burdick et al., <i>Digital Humanities</i> (Cambridge and London: MIT Press, 2012), pgs 42-45. <i>Activity:</i> Visualizing inconsistent data; Selection of projects and groups for final projects.
Week 4 February 28	<b>Humanities Design</b> <i>Lit.</i> Johanna Drucker, <i>SpecLab: Digital Aesthetics and Projects in Speculative Computing</i> (Chicago and London: University of Chicago Press, 2009) <i>Activity:</i> Exploring digital tools for the humanities vs. humanities tools for digital environments; first presentation of concepts for final projects.

Week	Topic, Readings, Assignments
Week 5 March 7	<b>Data Extraction and Analysis: Principles &amp; Processes (NLP, automated image analysis): Guest Speaker (Mauro Martino, IBM Research)</b> <i>Lit.</i> Stephen Ramsey, <i>Reading Machines: Toward an Algorithmic Criticism</i> (Urbana, Chicago, and Springfield: University of Illinois Press, 2011) <i>Activity:</i> Text and content extraction, machine reading, metadata formats
Week 6 March 14	<b>Digital Archives II: Cultural Heritage Archives</b> <i>Lit.</i> Henriette Roued-Cunliffe, Andrea Copeland, eds., <i>Participatory Heritage</i> (London: Facet Publishing, 2017) <i>Activity:</i> Presentation and discussion of revised final project concepts, technologies, and designs
Week 7 March 21	<b>Data Curation: Metadata, Machine Reading, Human Curation, Guest Speaker (MIT Libraries)</b> <i>Lit.</i> Andreas Ströhl, ed., Vilém Flusser: <i>Writings</i> (Minneapolis and London: University of Minnesota Press, 2002) <i>Activity:</i> Curating digital humanities content using different curation tools; Final project updates, including first designs.
Spring Break	
Week 8 April 4	<b>Visualizing Data II: Archival visualization</b> <i>Lit.</i> Kathy Bürger, David E. Polen, <i>Visual Insights: A Practical Guide to Making Sense of Data</i> (Cambridge, MA and London: MIT Press, 2014) <i>Lit.</i> Suguru Ishazaki, <i>Improvisational Design</i> (Cambridge, MA and London: MIT Press, 2003) <i>Activity:</i> Experimentation with visual display of complex archival content; presentation and discussion of final project updates
Week 9 April 11	<b>User Interface Design I: Principles, Methods, Guest Speaker (Mindy Seu, Harvard U.)</b> <i>Lit.</i> Gerard Jounghyun Kim, <i>Human-computer interaction. Fundamentals and Practice</i> (Boca Raton: CRC Press, 2015) <i>Activity:</i> Revision of UI and UX concepts of final projects
Week 10 April 18	<b>User Interface Design II: Practices, Evaluation</b> <i>Lit.</i> Lori Emerson, <i>Reading Writing Interfaces: From the Digital to the Bookbound</i> (Minneapolis and London: University of Minnesota Press, 2014) <i>Activity:</i> User testing of beta versions of final projects, preparation for workshop at MIT
Week 11 April 25	<b>Final Project Work</b> <i>Activity:</i> Discussion and revision of final projects,
Week 12 May 2	<b>Project Workshop</b> with students from FH Potsdam
Week 13 May 9	<b>Dry Run for Final Project Presentations</b>
Week 14 May 16	<b>Final Project Presentations</b> (Public)