

CMS.633/833

Digital Humanities: Topics, Techniques, and Technologies

Fall 2019, Tuesdays, 2 – 5 pm, Room: 5-217

Instructor:

Kurt Fendt, Room 14N-421, office hours: Mondays 3-4 PM or by appointment, email: fendt@mit.edu

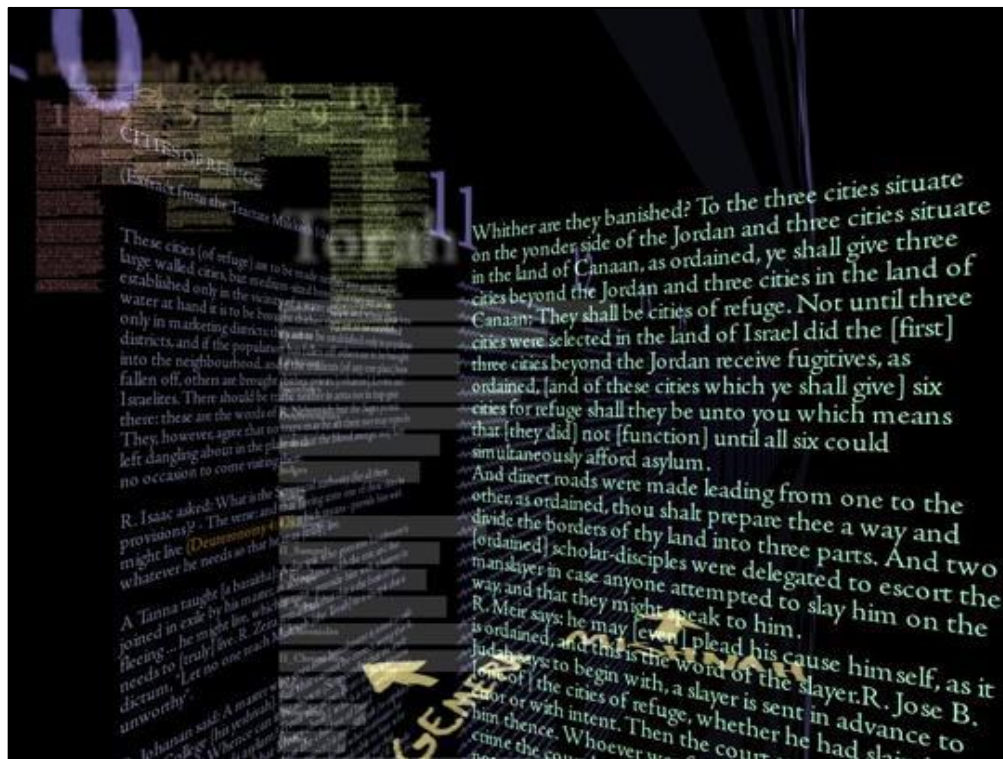
TA:

Ben Silverman, email: bsilverm@mit.edu

Website: <http://cms633.github.io>

Stellar Site: <https://stellar.mit.edu/S/course/CMS/fa19/CMS.633>

Annotation Studio: <http://mit.annotationstudio.org>



David Small's *Talmud Project*

Course description

Examines theory and practice of using computational methods in the emerging field of digital humanities. Develops an understanding of key digital humanities concepts such as data representation, digital archives, information visualization, and user interaction through the study of contemporary research in conjunction with working on real-world projects for scholarly, educational, and public needs. Students create prototypes, write design papers, and conduct user studies. Some programming and design experience is helpful but not required. Students taking graduate version complete additional assignments.

Learning Objectives

- Demonstrating, through presentations, discussions, texts, and project work an understanding of core Digital Humanities concepts;
- Engaging with complex humanities ideas, connecting them to computational approaches, and developing critical thinking across media;
- Developing basic design thinking concepts, engaging in collaborative planning, design, and project development processes;
- Learning how to critically analyze humanities content and data, and how to select appropriate computational methods, approaches, and tools in light of different use cases and audiences;
- Learning how to use a core set of Digital Humanities tools on humanities data.

Format and Requirements

This class will consist of reading discussions, demonstrations of tools and techniques, and hands-on project work. Occasionally, we will hear from guest speakers who work in museums, libraries, and research settings. Students are expected to comment on weekly readings on the class' GitHub site (two paragraphs minimum) and actively participate in class discussions on these readings. Rather than a summary of the readings, in your comments focus on agreeing or disagreeing with key theme or assertion that you find provoking and would like to discuss in class. Also use examples, e.g. through web links to support your arguments. Occasionally, students will be asked to annotate readings using the tool Annotation Studio (<http://mit.annotationstudio.org>). Before coming into class, **everyone** should read and think about the other students' comments in preparation for the class discussion. Taking turns, students will lead the weekly reading discussions by briefly introducing the readings (you are allowed use slides to summarize the core arguments and the students' reactions) and discuss them in light of the online comments by fellow students.

Small teams will be formed to work on a range of smaller projects in the first half of the semester. The second half of the semester will focus on developing the final small group project which will be selected mid-semester and will have to be completed by the end of the term. The final project will consist of a working digital prototype and a 15-page design paper.

Grades will be based on the following criteria:

- Final project (40%), including design paper and digital prototype
- Short projects (20%)
- Reading comments (15%)
- Presentations and project updates (10%)
- Class participation (15%)

Attendance and Participation

You are expected to attend class meetings regularly and on time, to complete assignments **before** class (post your reading comments, project updates, etc. **by 9:00 PM on Monday**), and to contribute actively and thoughtfully in class discussions. Participation includes sharing your own thoughts and listening closely to your classmates. Active participation is required and the effect on your grade will be determined by how often you engage in class discussion and how carefully you have read and thought about the assigned readings. Always bring a copy of the assigned readings to class each week or bring a laptop with the readings. Unexcused absences and habitual tardiness will affect your grade.

Please email the instructor in advance if you need to miss class due to illness or family emergency. 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 lecturers (who all have advanced degrees and who are all published writers) about all types of academic, creative, and professional writing and about all aspects of oral presentations (including practicing your presentations). We help you think your way more deeply into your topic, no matter what department or discipline you are in. The WCC is located in Kendall Square (E18-223, 50 Ames Street). 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/>. The Center's core hours are Monday-Friday, 9:00 a.m.-6:00 p.m.; evening hours vary by semester—check the online scheduler for up-to-date hours.

Class schedule (preliminary)

(Note: This is a preliminary syllabus; fine-tuning and changes in schedule or readings may occur. You will be notified if major changes need to be made.)

Date	Topics	Readings/Assignments
September 10	Introduction to Digital Humanities Sample DH projects DH Exercise: Turning Tarot cards into a digital object. Guest Speaker: <i>Emilie Hardman, MIT Archives.</i>	Assignments: Readings (on Stellar & some on Annotation Studio): <ul style="list-style-type: none"> • Read “A Short Guide to the <i>Digital Humanities</i> (p.121-125) in <i>Digital Humanities</i> • Read <i>Digital Humanities</i>, chapter 1 (pp. 3-26) U read: pp. 3-16; G : read in addition: pp. 16-26 Group project: Digital Tarot project (see handout)
September 17	Digital Transformations: From physical object to digital artefact: Digitizing Tarot – discussion of project ideas. Introduction to Final Projects	Assignments: <ul style="list-style-type: none"> • Annotate Vannevar Bush, “As We May Think” in Annotation Studio (http://mit.annotationstudio.org) • Christof Schöch: Big? Smart? Clean? Messy? Data in the Humanities, in: <i>Journal of Digital Humanities</i>, Vol. 2, No. 3 Summer 2013 • G: Miriam Posner: Humanities Data: A Necessary Contradiction, June 25, 2015, <i>Miriam Posner's Blog</i>
September 24	Data mining of open content I: Working with APIs Project Pitches	Readings: <ul style="list-style-type: none"> • Johanna Drucker: <i>Data as Capta</i>, Los Angeles, 2010 (Stellar) U Read: <i>HUMANITIES APPROACHED TO GRAPHICAL DISPLAY</i> (5 Pages) G Read rest of Drucker text <ul style="list-style-type: none"> • D. Boyd, K. Crawford: <i>Six Provocations for Big Data</i> (2011)
October 1	Data mining of open content II: Data Scraping Defining Final Projects	Readings: <ul style="list-style-type: none"> • Daniel Rosenberg and Anthony Grafton, <i>Cartographies of Time</i>, Chapter 1: “Time in Print” G . Also read Chapter 2
October 7	Mapping Time – Data Visualization I: Representation of time Final Project Pitches	Readings: <ul style="list-style-type: none"> • Edward Tufte, <i>Envisioning Information</i>, “Color and Information” Tools: <ul style="list-style-type: none"> • TimeMapper • SIMILE Timeline • D3 or other tools Assignment: Spatial ethnographies
October 15	Columbus Day Vacation	No class

Date	Topic	Readings/Assignments
October 22	Mapping Space – Data Visualization II: Mapping Literature and other data	Readings: <ul style="list-style-type: none"> David J. Bodenhamer, The Potential of Spatial Humanities; pp. 14-31; MARIA POPOVA: W.E.B. Du Bois's Little-Known, Arresting Modernist Data Visualizations of Black Life for the World's Fair of 1900 (www.brainpickings.org) Tools: <ul style="list-style-type: none"> CartoDB Google Fusion Tables/Maps/Earth Pro Mapbox, TileMill, etc.
October 29	Data Visualization III: Network Graphs and other visualization techniques <i>Guest speaker: Dario Rodighiero</i> , MIT Post Doc, CMS/W	Readings: <ul style="list-style-type: none"> Dario Rodighiero: <i>Mapping Affinities in Academic Institutions</i>, 2018, frontiers Jeffrey M. Binder, "Alien Reading: Text Mining, Language Standardization, and the Humanities", in: <i>Debates in the Digital Humanities</i>, 2016 edition, http://dhdebates.gc.cuny.edu/debates/text/69 Assignment: Work with text analysis tools and digital texts (see assignment) Tools: <ul style="list-style-type: none"> Stanford Named Entity Recognizer (NER) Voyant Tools JSTOR Lab Tools
November 5	Text as Data Methods of textual analysis	Readings: <ul style="list-style-type: none"> Marti Hearst: <i>What Is Text Mining?</i> (2003) Marti Hearst: <i>Untangling Text Data Mining</i> (1999) G: Katherine Hayles: <i>How We Read: Close, hyper, Machine</i>, ADE BullEtin, (150) 2010, pp. 62-79 Ahmed Elgamma et al. <i>The Shape of Art History in the Eyes of the Machine</i>, conference paper, (2018) Lisa Gitelman (ed.), <i>"Raw Data" Is an Oxymoron, Introduction</i> (Cambridge, Mass, MIT-Press, 2013, 1-14)
November 12	Design Thinking Approaches to Project Development Design process: Prototyping and wireframing Final Projects: Short write-up of project progress, brief in-class presentation Final Projects: Presentation of Design Sketches, initial technology implementations	Readings: <ul style="list-style-type: none"> Katja Tschimmel: <i>Design thinking as an effective toolkit for innovation</i> (2012) Matt Kirschenbaum, "So the Colors Cover the Wires": Interface, Aesthetics, and Usability G: Johanna Drucker, Performative Materiality and Theoretical Approaches to Interface, 2013 Human-centered Design Toolkit, "Hear," pp. 29-68

Date	Topic	Readings/Assignments
November 19	Data, Archives, Society <i>Guest Speaker:</i> Ben Silverman Final Projects: Presentation of Design Sketches, initial technology implementations	Readings: <ul style="list-style-type: none"> • TBD Assignment: Prepare presentation of digital prototype
November 26	Final project in-class work time, Presentation of digital prototype, refinement of prototype, brief presentation & feedback in class	Assignment: Written summary of project progress, work on Digital Prototype
December 3	Final project in-class work time Presentation of prototypes (dry run)	Assignment: <ul style="list-style-type: none"> • Draft of final paper
December 10	Final project in-class work time	Assignment: <ul style="list-style-type: none"> • Final project Presentation and Design Document due