

Mondays & Wednesdays, 3:30 - 5:00 PM, Room 1-277

Kurt Fendt, office hour: Wednesdays 2:00 - 3:00 PM or by appointment, email: fendt@mit.edu
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Slack: <https://mit-cms633.slack.com/>



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, students are encouraged to focus on agreeing or disagreeing with key themes or assertions that they find provoking and would like to discuss in class, and pose questions that the class can discuss, including the use of examples, e.g. through web links to support their arguments. Occasionally, students will be asked to annotate readings using the tool Annotation Studio (<http://app.annotation.studio>). Before coming into class, **everyone** should read and think about the other students' comments and questions in preparation for the class discussion. Taking turns, students will lead the weekly reading discussions by addressing the questions raised 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 (25%)
- Class participation (15%)

Attendance and Participation

Class attendance and participation are required. Participation in class discussion is important because it allows you to explore the texts and themes collaboratively, and in the process, discover meanings and issues that you probably would not discover on your own. Participation in class also challenges you to continuously question, refine and articulate your own ideas and interpretations. You are expected to complete assignments **before** class (post your reading comments, project updates, etc. typically **by**

10:00 AM on Mondays and Wednesdays, exceptions will be announced). 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. Unexcused absences and habitual tardiness will affect your grade. Please email me in advance if you need to miss class due to illness or family emergency. 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 with advanced degrees and publishing experience. The WCC can help you further develop your oral communication skills and learn about all types of academic, creative, and professional writing. The WCC helps you think your way more deeply into your topic, no matter what department or discipline you are in. You can learn more about the WCC consultations at <http://cmsw.mit.edu/writing-and-communication-center> and register with the online scheduler to make appointments through <https://mit.mywconline.com>. Please note that the WCC hours are offered Monday-Friday, 9:00 a.m.-6:00 p.m., and fill up fast.

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
Week 1 September 7	Introduction to Digital Humanities Part 1: Sample DH projects	Assignments: In-class activity See in-class announcement
Week 2 September 12	Introduction to Digital Humanities Part 2: From Humanities content to data	Assignments: Readings: <ul style="list-style-type: none"> • Read “A Short Guide to the <i>Digital_Humanities</i> (p.121-125) in <i>Digital_Humanities</i> (text on Canvas) • Check out three digital facsimiles for imaginary project (see assignment on Canvas)
September 14	From content to data: Data concepts & humanities data	Assignments: <ul style="list-style-type: none"> • Annotate Vannevar Bush, “As We May Think” in Annotation Studio (https://app.annotation.studio) Group project: Imaginary project (see instructions)
Week 3 September 19	Digital Transformations: Project Presentation	Explore the Comédie-Française Registers project (cfregisters.org) <ul style="list-style-type: none"> • Read <i>Digital_Humanities</i>, chapter 1 (pp. 3-26) U read: pp. 3-16; G : read in addition: pp. 16-26
September 21	What is data in the humanities? Review of OpenRefine work	<ul style="list-style-type: none"> • 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, Miriam Posner's Blog
Week 4 September 26	Data in the Humanities Introduction to Final Projects	Readings: <ul style="list-style-type: none"> • Johanna Drucker: <i>Data as Capta</i>, Los Angeles, 2010 (text on Canvas) U Read: <i>HUMANITIES APPROACHES TO GRAPHICAL DISPLAY</i> (5 Pages) G Read rest of Drucker text

September 28	Data mining of open content I: Working with APIs Final Project Pitches	Reading: <ul style="list-style-type: none"> • D. Boyd, K. Crawford: <i>Six Provocations for Big Data</i> (2011) (text on Canvas) Develop ideas for a final project (see also links to past student projects)
Week 5 October 3	Data mining of open content I: Working with APIs Guest Lecture: David Nuñez, Technical Director, MIT-Museum	Readings: <ul style="list-style-type: none"> • Christine L. Borgman, <i>Big Data, Little Data, No Data - Scholarship in the Networked World</i>, 2015, MIT-Press (Chapter 7) (text on Canvas) U: pp. 161-164, G: 161-185
October 5	Data mining of open content II: Defining Final Projects, Group formation	Assignment: Using the APIs from the MIT Museum, the Harvard Art Museums, etc.
Week 6 October 10	Indigenous Peoples Day (formerly: Columbus Day)	No class
October 12	Data mining of open content III: Data Scraping Final Project Presentations I	Activity: Web Scraping exercise Tools: Free Web scraping tools including Octoparse, Parsehub, Mozenda, etc.
Week 7 October 17	Mapping Time – Data Visualization I: Representation of time Final Project Presentations II (Revisions)	Readings: <ul style="list-style-type: none"> • Edward Tufte, <i>Envisioning Information</i>, “Narratives of Space and Time” (text on Canvas) • Daniel Rosenberg and Anthony Grafton, <i>Cartographies of Time</i>, Chapter 1: “Time in Print” (text on Canvas) • G. Also read Chapter 2 (text on Canvas)
October 19	Mapping Time – Data Visualization I:	Readings: Tools: <ul style="list-style-type: none"> • TimeMapper • Timeline.js • D3 or other tools Assignment: Spatial ethnographies

Week 8 October 24	Mapping Space – Data Visualization II:	Readings: <ul style="list-style-type: none"> • David J. Bodenhamer, The Potential of Spatial Humanities; pp. 14-31; (text on Canvas) • 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)
October 26	Mapping Space – Data Visualization II: Mapping Literature and other spatial data	Tools: <ul style="list-style-type: none"> • Carto • Google Maps/Earth Pro • Mapbox, TileMill, StoryMap, Neatline, Leaflet, etc.
Week 9 October 31	Data Visualization III: Network Graphs and other visualization techniques Guest Lecture: TBD	Readings: <ul style="list-style-type: none"> • Dario Rodighiero: <i>Mapping Affinities in Academic Institutions</i>, 2018, frontiers (text on Canvas) • Edward Tufte: <i>Envisioning Information</i>, Chapter: Color and Information, 1990, pp. 81-96 (text on Canvas) • G: Johanna Drucker, excerpts from <i>Graphesis. Visual Forms of Knowledge Production</i> (text on Canvas)
November 2	Data Visualization III: Visualization Techniques & Tools	Reading: Excerpts from „W.E.B. Du Bois’s Data Portraits - Visualizing Black America (text on Canvas) Tools: Tableau: https://www.tableau.com/academic/students Gephy: https://gephi.org/
Week 10 November 7	Text as Data I Methods of textual analysis	Readings: <ul style="list-style-type: none"> • Marti Hearst: What Is Text Mining? (2003) • Marti Hearst: Untangling Text Data Mining (1999) • G: Jeffrey M. Binder, “Alien Reading: Text Mining, Language Standardization, and the Humanities”, in: <i>Debates in the Digital Humanities</i>, 2016 edition Assignment: Work with text analysis tools and digital texts (see assignment)

November 9	Text as Data II	Tools: <ul style="list-style-type: none"> • Stanford Named Entity Recognizer (NER) • Voyant Tools, AntConc • JSTOR Lab Tools
Week 11 November 14	Text as Data III Text and Reading Encoding texts in TEI Guest Lecture: Nick Laiconi (TBD)	Readings: <ul style="list-style-type: none"> • Lisa Gitelman (ed.), <i>"Raw Data" Is an Oxymoron, Introduction</i> (Cambridge, Mass, MIT-Press, 2013, 1-14) (text on Canvas) • G: Katherine Hayles: <i>How We Read: Close, hyper, Machine</i>, ADE Bulletin, (150) 2010, pp. 62-79 (text on Canvas) • Ahmed Elgamma et al. <i>The Shape of Art History in the Eyes of the Machine</i>, conference paper, (2018) (text on Canvas)
November 16	Final Projects: First 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) (text on Canvas) • Matt Kirschenbaum, "So the Colors Cover the Wires": Interface, Aesthetics, and Usability
Week 12 November 21	Design Thinking Approaches to Project Development Design process: Prototyping and wireframing	Readings: <ul style="list-style-type: none"> • Johanna Drucker, Performative Materiality and Theoretical Approaches to Interface, 2013 • Human-centered Design Toolkit, "Hear," pp. 29-68 Assignment: <ul style="list-style-type: none"> • Prepare presentation of digital prototype
November 23	Data, Archives, Society Archiving Fandom	Readings: <ul style="list-style-type: none"> • Jez Collins and Oliver Carter: "They're Not Pirates, They're Archivists". <i>The Role of Fans as Curators and Archivists of Popular Music Heritage</i>, in: Sarah Baker (ed.): <i>Preserving Popular Music Heritage</i>, New York, 2015, Routledge, pp. 127-138
Week 13 November 28	Final Projects: Presentation of updated Design Sketches, revised technology implementations	Assignment: Short write-up of project progress, prepare brief in-class presentation

November 30	Black Digital Humanities	Reading: Alison Martin, „Black Music Matters: Affirmation And Resilience In African American Musical Spaces In Washington, DC“, in: <i>Black Lives Matter & Music: Protest, Intervention, Reflection</i> , Fernando Orejuela , Stephanie Shonekan (eds), Bloomington 2018, Indiana University Press, pp. 71-85 (text on Canvas)
Week 14 December 5	Final Projects: Presentation of digital prototype, refinement of prototype, brief presentation & feedback in class	Assignment: Written summary of project progress, work on Digital Prototype
December 7	Final Projects Project work	Assignment: Work on Digital Prototype
Week 15 December 12	Final Projects: Presentation of prototypes (dry run)	Assignment: Draft of final paper
December 14	Final project Presentation	Assignment: Final project Presentation and Design Document due