We know quite a bit about who first designed home computers, where they were built, and how much money was made. We know far less, however, about who used them, for what purposes, and just how vast the early home computer user base was. In this project studio, students will design and theorize emergent practices at the intersection of history, digital humanities and data visualization in order to explore this tension. Primarily focusing on a developing dataset from the early 1980s Apple II enthusiast magazine *Softalk* (which has a vast collection of letters-to-the-editor), students will consider how contemporary data techniques may be employed to engage traditional historical methodologies such as epistolary analysis, discourse analysis, and reception studies.

In doing so, we will produce designs which can visualize and revitalize the contributions of otherwise non-obvious historical actors, namely home computer users and consumers. The historical period in question will allow students to engage knowledge about early home computing hardware and software, including video games. Activities will include reading across the disciplines of computer and video game history, digital humanities, and data visualization; engagement with primary documents; and the conceptualization, planning and production of digital media visualizations.

**Please note:** Since this is a class dealing with historical events, the first 6 weeks of this course will involve an extensive quantity of reading to get everyone up to speed on the state of the computer industry in the 1980s.

**Course Texts:**
All readings will be provided as PDFs.

**Evaluation**
Course grades will be based on Participation (5%), Primary Document Analysis Short Papers (25%), Visualize ANYTHING Assignment (20%), and Final Project (50%).

**Participation (5%)**
At the graduate level, students are expected to show rigorous engagement with readings and course content within the context of class discussion. Participation also, generally, addresses arriving to class on time, with your readings and other necessarily materials.

**Primary Document Analysis Short Papers (25%)**
A core part of our learning objectives in this course is to understand the culture of home computer usage among the user base. To do that, one of our best resources is the magazine culture of the late 1970s and 1980s. For the first 6 weeks of class, students will be assigned to read a 3-month run of a specific computer enthusiast magazine *in addition to course readings*. For 4 of those 6 weeks, students will submit 2 required elements for their short papers:

1. a short (700-word) analysis of that specific magazine *as a historical document*. In other words,
what can be derived about computer culture, user practices, and consumer values by analyzing the form and content of the magazine?

2. 2-3 images from magazines (screen grabs) that you think are especially interesting/relate to points in your paper. These will be primarily used to springboard discussions in class. You may, but are not required, to discuss them in your paper.

Paper must be turned in by midnight before class via T-Square (assignment posting will close at midnight). Papers turned in late can receive no more than 2 points (out of a possible 5). Papers more than a week late will not be accepted.

Some week’s magazine readings are mandatory, others are left to individual discretion. A schedule:

- 9/13: Free Choice
- 10/4: Free Choice

**Options for Free Choice include:**

- *Softalk*, any 3 month range

**Visualizing ANYTHING Assignment** (20%) Due 10-25

Not all students in the course will have the same fluency with visualizing or coding data. This is intended as a safe, exploratory assignment to force students to simply get their hands dirty visualizing anything from the dataset created October 4 (see syllabus).

Students without coding backgrounds are recommended to explore Tableau, which is professional-grade data visualization software offering free licenses for students [https://www.tableau.com/academic/students]. Students with coding and visualization experience are welcome to use any software they prefer.
This assignment should produce either:
1. A visualization or set of visualizations that draw relationships between 3 variables (ideal for non-coders in Tableau)
2. A visualization that draws relationships between 2 variables and has an interactive component

Students should be prepared to present their project and receive critique on October 25.

*Final Project (50%) Proposal Due 11-8; Final due 12-6*

For the final 6 weeks of class, students will work on a final project. This final project may take a range of shapes, and does not have to result in a digital/visualization object. Students who would prefer to offer a written final are expected to produce a high-quality seminar paper pertaining to the course content.

<table>
<thead>
<tr>
<th>Technical Difficulty</th>
<th>Low</th>
<th>Medium-Low</th>
<th>Medium-High</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Student employs, at a minimum, static visualizations made in Tableau, most likely in the context of a paper</td>
<td>Student builds out site/digital object with limited/no interactivity but modest use of dataset</td>
<td>Student builds out site/digital object with modest interactivity and dataset</td>
<td>Student produces highly interactive site with expanded dataset, offering an array of interactive visualizations; has qualities of a professional draft</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Academic Difficulty</th>
<th>Low</th>
<th>Medium-Low</th>
<th>Medium-High</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Assignment is largely technical, deals with dataset in un-interrogated way. Draws from selective primary sources, low engagement with secondary sources. Deals with cultural myths rather than academic arguments.</td>
<td>Project offers some new information about early computing culture, through either written or digital means. Draws from selective primary sources, low engagement with secondary sources. May deal with common cultural myths rather than academic arguments.</td>
<td>Project offers some new information about early computing culture, through either written or digital means. Engages with primary and secondary sources. Emphasis on engagement with academic arguments.</td>
<td>Student composes a serious, original, rigorous academic intervention within discipline of computer history or allied field (most likely in form of academic paper); extensive use of primary documents and engagement with secondary sources</td>
</tr>
</tbody>
</table>

| Creative Intervention | Wild card category to be taken into consideration w/ above metrics, emphasizing extent to which student's final project engages with concept of data visualization or computer history as norms, or offers a provocative, creative interpretation of “visualization” as a technique. |

A 3-4 page extended proposal is due for the final project on November 1. This may take the form of a design document, an extended paper abstract, or some other appropriate format. Students should be prepared to offer a short presentation in class, with slides.

Final projects are due in class December 6. Student should be prepared to showcase their work in class.

**August 23: Course Introduction**
- Greetings + Primary Document Discussion
- *Wargames* (1983)
August 30: Crash Course in Computer History + Introduction to Softalk

- Computer History Museum’s “Timeline of Computer History”

September 6: Grand Narratives, In Their Own Words


September 13: Academic Takes + Economic Dynamics

  [http://www.academia.edu/download/39419547/Game_History_as_HoT.docx](http://www.academia.edu/download/39419547/Game_History_as_HoT.docx)
- Primary Documents: Free Choice

September 20: Digital Humanities, Data Visualization, and/in History I

- Photogrammar: A New Look at New Deal Photography, [http://muse.jhu.edu/article/622100](http://muse.jhu.edu/article/622100)
- Reading the Softalk dataset (on T-Square)
- *Computer Gaming World*: December 1983-April 1984 (bimonthly schedule) [REQ]

September 27: Digital Humanities, Data Visualization, and/in History II

- TBD
- TBD
October 4: Creating Your Own Softalk Dataset

- In class, students will come prepared to develop their own intake form for coding a minimum of 1 month of Softalk. Students may copy the professor’s coding Google form or develop their own in a preferred format. Issues coded must be after Oct 1982. Students will use data for their Visualize ANYTHING Assignment, due October 25.
- Primary Documents: Free Choice

October 10: RECESS NO CLASS

October 18: Computers Were Our Destiny: Fucked Futures


October 25: Visualize ANYTHING Assignment Presentations

November 1: Open Studio

November 8: Final Project Proposal Due

November 15: Open Studio—Small Group Crits

November 22: NO CLASS-CANCELLED

November 29: Open Studio

December 6: Final Presentations