

### Suggestions for IMA Paper Topics

I've compiled a list of paper topics students might want to pursue in the Issues in Multimedia final projects. These are grouped into 8 categories. Some subjects appear in more than one; students may use the categories to help think about what interests them. The list is not exhaustive; students may select their own topic, subject to approval. (See the IMA syllabus.)

#### Socio-cultural:

1. Attitudes towards technology generally and computing specifically vary from place to place around the world. Report on one or two aspects of how computer technology is treated or used differently in a given place than it is here. This project is especially engaging if you or relatives are from the area you choose to study.
2. Many are increasingly concerned that technology is exacerbating differences between rich and poor. Research and discuss one program studying these differences or working to ameliorate them.
3. Psychologists and sociologists have already claimed that it is possible to get addicted to Internet or some aspects of it (gaming particularly). Report on the scientific literature on this subject.
4. Select a few categories from the W3C localization guidelines which we did not discuss in class and explore how they play a role in a software localization you are familiar with. (You may select a hypothetical case: for example, what would need to be done to make a Québécois version of a popular software package or website.)
5. At some universities (e.g. Carnegie Mellon University) psychology departments or psychologists generally are often involved in research into human-computer interaction. Discuss some area of psychology we have not already discussed in class applied to HCI.
6. It is often claimed that users of "fringe" operating systems (Mac OS, Linux, etc.) are different (for example, that Mac OS users are more artistic) from Windows users (which can be regarded as mainstream for this project) in some other way beyond their choice of operating system. Report on the merits of this thesis.
7. Discuss the social interactions in a particular online community (IRC channel, blog, discussion board, MUD, etc.) and how they can be profitably elucidated with the help of traditional sociological hypotheses. (Or, alternatively, how they can be used to refute or refine said hypotheses.)

#### Economic:

1. Many are increasingly concerned that technology is exacerbating differences between rich and poor. Research and discuss one program studying these differences or working to ameliorate them.
2. Corporations sometimes question the merit of the "upgrade cycle". Explore this consideration.
3. Several large corporations (including Microsoft) have gone on record denouncing open source software. Explore the corporate concern and evaluate its justification.
4. The RIAA and MPAA claim movie and music piracy on Gnutella, Limewire, the original Napster, Bittorrent, etc. have cost them significant revenues. Discuss the merits of their case.
5. Select an aspect of online business (marketing, sales, customer support, etc.) and discuss how it is different from the conventional approaches.

6. One of our texts, *The Mythical Man Month*, was written many years ago, before the personal computer was invented. Discuss a case which shows that one of its theses is still relevant even today. (For the purposes of this assignment you may regard any case in the personal computer industry as “today”.)

Political:

1. Report on the role of blogs in recent political campaigns.
2. What should the role of governments be in determining online content? Pay close attention to the technical aspects of this question, if you can. (See topic 2 under technical.)
3. Increasingly NGOs find that their online presence is vital to their continued work. Report on a case study of one where this was true.
4. Piratebay.se has basically told American lawyers to go away, as their legal threats have no jurisdiction in Sweden, where the site is hosted. Comment on the jurisdictional issues involved in this case. In particular, does this suggest that new treaties on intellectual property are needed?
5. Discuss the current debates over software patents.

Technical:

1. As we discussed in class, detailed verification of complex computing systems is difficult (to say the least!). Report on the current state of the art in program (or hardware) verification. (NOTE: This project is especially challenging, but very rewarding, as it requires successful “translation” from technical language to language comprehensible to the lay-person. You may assume that the class understands what has already been presented in class.)
2. Google and other search engines have agreed to provide “censored” versions of their services for overseas use (particular in China). Discuss web proxies and how they might be used to overcome this problem.
3. Report on how multimedia (however understood) has (or hasn’t) changed the nature of programming languages.
4. SCO has claimed that some Linux distributions have illegitimately incorporated code from from some of its products. Discuss criteria for determining the truth of this sort of allegation.
5. Report on an aspect of computer security and what the causal user can do about the issue.
6. Discuss a typical (personal) computer from the year of your birth and the typical computer available for the same price today. What is the same? What has changed?

Artistic:

1. Discuss the merits of Flash (or another “new media” authoring tool) from the perspective of an artist.
2. An episode of *South Park* has some (fictitious) characters claim that they are not worried about their work being distributed on Internet by file sharing programs because they are musicians about the music, not about the money, whence they are happy for the publicity and the sharing of the joy of their work. This is accompanied by parodied versions of real life popular musicians saying they are in it for the money and hence file sharing is a problem. Your project: argue a side in this debate.

3. Good computer/video games are often regarded (as we discussed) as ones with significant aesthetic qualities. Using a different school of art appreciation from any we discussed in class, evaluate the merits of a game. Alternatively, discuss a good game which you feel has no aesthetic qualities and yet merits for some other reason the label of a “good game”. (Be sure to tell us why you think the qualities that make it good are not aesthetic ones!)

#### Humanistic:

1. Some video games (for example, some of the Final Fantasy series) make use of characters named for real world personages. Report on how one such character is similar to its real-world counterpart.
2. Increasingly some NGOs find that their online presence is vital to their continued work. Report on a case study of one where this was true.
3. Sketch in outlines the history of the personal computer. Be selective and concentrate on a theme or segment of the time involved, as this is otherwise an unmanageable task.
4. Sketch in outlines the history of the computer/video game. Be selective and concentrate on a theme, genre or segment of the time involved, as this is otherwise an unmanageable task.
5. Sketch in outlines the history of special effects in (cinema) movies. Be selective and concentrate on a theme, genre or segment of the time involved, as this is otherwise an unmanageable task.
6. Discuss a typical personal computer from the year of your birth and the typical computer available for the same price today. What is the same? What has changed?
7. Report on the current state of the art in computer aided instruction in a particular field.

#### Environmental:

1. Computers and their peripherals require many heavy metals, plastics and other components potentially damaging to the environment to build. Report on the state of the art in computer recycling or on research and development to reduce the need for these damaging components.

#### Health:

1. Discuss a health related concern pertaining to computer use (e.g. carpal tunnel syndrome, repetitive stress injuries, etc.).