

Comp 96: TOPIC PREFERENCES SHEETS & Pre-Bibliography

w/Asg-03

NAME: _____

MAJOR: _____ Circle Year: Fr So Ju Sr Other

Prioritize *at least* your first five picks (number each pick 1 thru 5); however, prioritizing *more* than five is better in the event that everyone picks the same ones. Also, you may assign #1 (#2, #3, etc.) to more than one topic if you find them equally interesting. The more information you provide, the easier it will be for us to make decisions you like. We'll provide a comments section at the end of this form.

Topic No.	Brief descriptor	TOPICS and related controversies	
1	Hate Speech	Whenever a new form of communication arises, there is concern that it will give rise to abuse. Just as a bulletin board system (BBS), like Usenet, can be used for healthy political debate, it can also be used to air very unpopular opinions, such as the charter of a hate group. Usenet News was originally designed as a small group, with no central authority, little control, and lots of trust. Do these ideas still work with millions of users? Should all public newsgroups be moderated and censored? Should hate speech be banned from Web pages? Would such censorship inhibit the free flow of ideas? Would it deny us certain opportunities? Or is it worth it so that our children aren't exposed to such venom? How do morality <i>and</i> ethics fit into this discussion? The 1 st Amendment? <i>Other</i> rights guaranteed by other Amendments?	<input type="checkbox"/>
2	Automation and jobs	Automation and advances in information technology can and have caused certain groups of people to lose their jobs—bookkeepers, bank tellers, etc. As a society, should we be concerned, or is it simply the cost of progress and of staying competitive internationally. If we <i>should</i> care, what should be done about it? For example, should these individuals be retrained? To do what? What sort of "people pump" should be implemented? Who should bear the most responsibility—the government, private industry, or should the primary responsibility be left to the individual? Why? To what extent should others be involved? Why?	<input type="checkbox"/>
3	Office of Future	Computers, fax machines, modems, cellular phones, the Internet, e-mail, voice mail ... The office of the future could mean that we will have no real office to go to. Why should a company provide expensive office space for you when you can be equipped more cheaply to work from home or from your car? Who will benefit most from such an arrangement—the employee, or employer? Why? What are some drawbacks? For whom? What are the tradeoffs? What are some possible solutions?	<input type="checkbox"/>
4	Neo-luddites	Modern-day luddites, or "neo-luddites," paint a very dystopian picture of the proliferation of information technology and the negative effect it has had on individuals and on society. They see such technology as an unmitigated curse. It robs people of their jobs, their privacy, their participation in democratic government, and even their dignity as human beings. Do you agree at some level with their beliefs? Why or why not?? Or do you believe that information technology serves as the motor of all progress, and at the source of prosperity and therefore happiness?	<input type="checkbox"/>
5	Workplace privacy	Should employers be allowed to read employee email, especially when it's obvious from the subject line that it's personal? Shouldn't email messages that a person sends from his/her company's mail server be afforded the same level of privacy as first-class mail that comes to an employee at his/her desk? How far should employers be allowed to electronically monitor their employees; e.g., count keystrokes, time phone calls, time coffee and bathroom breaks, etc? Are the benefits worth the risks? Under what conditions should such monitoring be allowed? Shouldn't employees have some measure of privacy as they work? Where and under what circumstances? Where should the line be drawn, and why?	<input type="checkbox"/>

6	Medical database	National health care policies continue to be a part of our national agenda. One topic of concern is: should there be a national computer database of all of our medical records? Should a "smart card" or "optical storage" card be used to store all medical data about you? Why or why not? What are the risks? Are the risks worth the benefits? Why or why not?	<input type="checkbox"/>
7	Human Genome Initiative	The breaking of the genetic code and new techniques to analyze genes have given scientists the ability to understand the relationship between the biochemical building blocks of cells and the traits and characteristics of living organisms, including humans. These new capabilities offer the prospect of eliminating much human suffering, but they also present some serious ethical dilemmas and risks to society. Such knowledge and the tests it makes possible could lead to discovery of a close association between some marker and some benign aspect of human variability, such as eye color, body shape, weight, etc. With such knowledge within our grasp, medical ethicists grapple with some very tough questions. Does detecting the mutant gene that leads to Huntington's disease (which usually permits normal life until one's 40s or 50s) justify abortion of a fetus? Consider that some genetic tests will, at best, provide only <i>probabilistic</i> predictors of some condition. If in the future genetic tests and intervention techniques become cheap and widely available, will decisions about a child's eye or hair color, adult height, etc. be left to parents to decide? Should they? Should a prospective employer use genetic screening to decide whether or not to hire an individual? Do the benefits outweigh the risks? How far can we go before we have crossed the line?	<input type="checkbox"/>
8	Privacy and Matching	Governments have been using <i>computer matching</i> —matching records from one database with records from a different database (data collected for an entirely different purpose, and often by a different agency)—since the early 1970s, to detect possible fraudulent behavior by its citizens (i.e., "double dipping" into benefits, failing to register for the draft, etc.). Some privacy advocates suggest that computer matching is an unwarranted invasion of privacy, and a violation of our rights. In our legal system, there must be some <i>pre-existing evidence</i> of wrongdoing <i>before</i> an investigation can begin; matching activities cast a huge net, searching records of thousands of people without any evidence of wrongdoing. Is this ethical? Do the benefits outweigh the drawbacks? Are there enough safeguards followed?	<input type="checkbox"/>
9	Hackers	Should " <i>intent</i> to cause harm" be taken into account when penalties are given to those who break into computer systems? In other words, should punishment be less severe for recreational hackers than it is for "crackers" who break in with the intention of committing a crime, such as stealing trade secrets or destroying files? Why or why not? Is it immoral to break into a government computer if one has good intentions—such as to point out a security leak? Why or why not? Do the tradeoffs outweigh the risks?	<input type="checkbox"/>
10	IT and Warfare	How has <i>information</i> technology changed the face of war? Is this an appropriate or moral use of our resources? Should we be diverting those resources or knowledge to better the human condition in some other way? Will future information technologies serve more to save lives on the battlefield, or will they serve to make warfare too easy because we have the technological means? Why or why not?	<input type="checkbox"/>
11	Virtual Reality	Future virtual reality systems will likely help us in many ways: medicine, scientific visualization, virtual walk-throughs, virtual exploration, etc. But V.R. critics have raised some questions about the psychological and physiological side effects. When such systems are inexpensive enough to be used by the general public, what are the risks? Could virtual realities be so much better than 'real life' that children and adolescents become addicted or dependent? Should use by minors be regulated by the government, the way that driving cars are regulated, or left to parental discretion? Why? Other ideas?	<input type="checkbox"/>
12	Artificial Intelligence	<i>Star Trek, Bicentennial Man, Space Odyssey 2001, Demon Seed...</i> For years, Hollywood has been making movies about man's quest to develop an artificial intelligence. Should humans strive to build artificial beings/computers that, in 75 or 100 years from now, might evolve into intelligent and sentient beings? Why or why not? Is it ethical to pursue such a goal? What would creating such machines mean for the rest of us? How might they fit into a society? What would be the advantages; the risks? Is it worth the risk? Should it have any kind of rights? Would it be immoral to unplug it or to destroy it? Why or why not?	<input type="checkbox"/>

13	Gender & Computer Science	<p>Why are there so few female computer scientists? Are girls discouraged from engaging in studies or behaviors that could lead such a career? How? When? By whom? And if so, <i>who</i> is responsible—schools? teachers? parents? the media who present stereotypical nerds behind glowing computer screens? Or have most women simply chosen not to follow such a career for other compelling (and guilt-free) reasons? If so, what are they? Should anything be done to try to change any of this? Consider that the U.S. has a shortage of computer scientists, and individuals are being brought over from other countries. Would it be to our advantage to take action, at some level? If so, what should be done, how, and by whom? If not, why not? Who's responsible?</p>	<input data-bbox="1430 205 1490 283" type="checkbox"/> <input data-bbox="1430 403 1490 480" type="checkbox"/>
14	Universal Access	<p>Is providing universal access to the Internet a worthy goal? Why or why not? If it is, then what <i>minimum</i> basket of services should be available to everyone, and why? How should it be provided? Should the government bear primary responsibility, or will a free-market model work better? (Think about comparisons with the telephone, and with education). Will failure to act widen the gap between the haves and the have-nots for future generations? Why or why not? Are we putting too much emphasis on being wired?</p>	<input data-bbox="1430 504 1490 581" type="checkbox"/>
15	Digital Manipulation	<p>With digital techniques, it's becoming difficult to distinguish what's real from what's not. <i>National Geographic</i> digitally moved one of the great pyramids of Giza so that the photo fit better on their cover. <i>Time</i> darkened the shadows on O. J. Simpson's face on it's cover photo, resulting in making him look more ominous. A famous television news station changed part of our view of Times Square on New Year's eve 1999. We can create entirely computer-generated characters (people, dinosaurs, etc.), or make people appear in places or times in which they never existed, or alter images of people to make them appear younger or better looking. When does digital manipulation cross the line from artistic license to deception? What are the dangers here? Isn't some of this unethical? Dangerous? Shouldn't we have laws to protect us, perhaps to require that digitally altered photos come with a warning? When? On the other hand, what does it hurt? Aren't people sophisticated enough to know that photo re-touching has been done for years, even before we had computer software to make it easier? Doesn't that fall under freedom of expression, guaranteed by the First Amendment?</p>	<input data-bbox="1430 762 1490 840" type="checkbox"/>
16	Key Escrow	<p>Much has been discussed about "key" encryption systems, which help to protect not only one's personal communications, but also sensitive corporate information from falling into the wrong hands; if it is intercepted, it is gibberish unless one has the secret "key" (like an access code) to decrypt it (turn it from "cyphertext" back into plaintext). The controversy lies when government agencies such as the FBI, CIA, and NSA are unable to decipher intercepted messages when they are investigating potential threats to national security (such as from suspected terrorists), or potential drug dealers, or those who traffic in child pornography or other illegal activities. It has been proposed numerous times that a government agency should be given a copy of all keys, to be held in escrow, and used only in the event that such an investigation is warranted. "Clipper" was one of the first key escrow systems proposed, with many iterations to follow. Privacy advocates believe that this is akin to giving the government a key to your home, and do not believe that the potential benefits outweigh the risks. Should our government be allowed to hold encryption keys in escrow? Why or why not? Are there alternatives that would be as effective?</p>	<input data-bbox="1430 1241 1490 1318" type="checkbox"/>
17	Fair Use and the Internet	<p>Lawsuits concerning Napster have been big news in recent months, and opinions differ among lawyers as well as among musicians. The debate frequently centers on differing opinions concerning "fair use." Do sites like Napster promote the illegal distribution of music without appropriate compensation to companies and artists, or are individuals responsible? Does the claim that Napster does nothing to harm music sales and that it actually boosts sales instead, by introducing consumers to new artists and prompting them to purchase albums after hearing a few songs on Napster, have any merit? Even if someone is at fault, many disagree on who to blame. Companies like Napster contend that they only provide a service and that they hold no responsibility for the actions of clients, while music companies</p>	<input data-bbox="1430 1690 1490 1768" type="checkbox"/>

		frequently blame and target Napster and its contemporaries, claiming that this proliferation of music depends on their product. The controversy also extends into other media realms, with arguments over a consumer's right to bypass DVD copy protection. What are the consumer's rights and responsibilities? Should this sharing of copyrighted material be legal, or legal only within certain parameters? Who is responsible for protecting and enforcing copyrights? Should Napster-type companies continue operating unchecked? Should more restraints and rules be applied, or should these companies be forced to close down entirely?	
18	ISPs and Liability	Many individuals and companies rely upon Internet Service Providers for Internet access, but the responsibilities, liabilities, and obligations of ISPs are frequently debated. Should ISPs be held legally responsible for content provided or distributed through their service? If ISPs do have some liabilities, to what extent can they be held responsible? Should such liability stop at the criminal level, with issues like pornography, or should it extend into the civil realm as well, opening the door to libel suits and other pursuits? If ISPs should have some responsibility for the content channeled through them, how should they enact this responsibility, and how much vigilance constitutes sufficient effort on the part of an ISP? Recent complaints from European countries concerning Nazi-themed items on auction sites have introduced an additional complication. Should liability be restricted to the ISP's country of origin, or does liability extend to an international scale, such that ISPs are held accountable for enforcing laws in other countries?	<input type="checkbox"/>
19	E-voting	In the wake of the recent election controversy, many public figures have called for an update to our current methods of voting, and e-voting has been raised as a possibility. Is this a realistic possibility on a local, state, and/or national scale? What kinds of problems would electronic voting pose for election officials? Would old problems such as fraud and inaccessibility rear their ugly heads again in new forms, and how would such problems be addressed? Would electronic voting be accessible and desirable for all people, or would it pose challenges to some, making voting less appealing or available to them? Would this idea be cost-effective, and what kind of infrastructure would it require? Would polling places still be used, or would people be able to vote from home (and would that make the system unfair to some)? What lessons have emerged from trial runs of electronic voting, such as the Arizona primary? Would this system be preferable to current methods in certain aspects? What are the possible manifestations of electronic voting?	<input type="checkbox"/>

ADD any of the *posted* ideas you like (attach a separate page, identifying it by its number); be sure you assign each a *priority* number.

COMMENTS, if applicable. (Why you have a special interest in a particular topic, for example.)

Staple your SHORT pre-bibliography to your completed form.

DON'T FORGET to make yourself a **copy** of this form and of your short bib before you turn everything in.

3 July 2001