5/12/2019

Final Exam

Medst 255 New Technologies

Aliza klagsbrun

Read all the instructions in the final exam instructions carefully before beginning! You’re required to write into this document, and adding the necessary pages. Re-save this file as your own, and submit it to me on ***MAY 14, 2019.***

**Essay Question I.**

**New technologies have always produced unintended consequences. One result of this would be how UX designers and engineers face a number of new ethical challenges today with the rise of technology regarding our interaction with it and dependence on it.**

**What is the primary job of a UX designer? Discuss the principle ethical quandaries faced by UX designers. What is persuasive design? Discuss the ways you feel this positively and/or negatively affect user behavior.**

*With the advent of new technologies there are always unintentional negative ‘side effects’ that come along with them. These side effects come in all different forms. Sometimes they present as health risks other times they may be issues that disrupt social interaction or relationships. The more that is created in the form of new media allows these side effects to grow in ways our brains cannot even begin to imagine. The UX, user experience, designers have no intention of creating technologies that may be potentially harmful, aside from their designated purpose. Unfortunately there is almost never a situation where a new technology comes to market in a perfect form that does not have any side effects.*

*Today companies want to operate at peak efficiency which has translated into machines doing the work that people used to do. This has been detrimental to the physical labor force because people are being replaced by machines. In addition to the actual loss of a job, it is also somewhat degrading for people to know that they are no longer useful or incompetent because the machine can do a perfect job every time most of the time faster than the human can. Physiologically that can be very painful for a person. There have been new developments of airplanes that can now fly on their own, which means that sometime in the near future there may be no more human pilots.*

*Having smart phones has been tremendously helpful for us as a society in the modern age. Having the world at our fingertips gives us tremendous power. Always having access to current events, having the ability to speak face to face with people thousands of miles away, having endless amounts of useful apps allowing us to use our time productively… the list goes on. On the flip side look at the negative effect of some of these things. How much of our lives is not private anymore? When using an app that requests access to your contacts or location, or browsing a site that asks you to allow the use of cookies. There is so much data stored about us with or most of the time without us realizing that we are willingly signing away private information. The people who design these technologies in a way that they purposely collect data about us to help them ‘help us’, or at least that’s what they tell us. They tell us in a most persuasive manner how helpful and beneficial all these new technologies will be to our lives. A lot of what they know about us is used to help the developers make the technology more addictive and intrusive. Lots of the technologies we interact with were designed to distract us from important tasks in our lives. They are made to be addictive, sometimes even built in a way where they manipulate how we think. The data they collect allows the designers to break people up into different demographical groups to better market us on their product.*

*Some of the newer technologies that have come to market recently have been tremendously helpful initially until they were discovered to be a little bit too intrusive. The technology that is used to surveil old people that monitors things like what and how much they eat, what their location is, and their intake of their medications seems to some as having crossed a line. There is also technology that parents can use to track their children. On the surface these concepts sound fabulous! There is potential to skirt many issues by using these technologies to keep track of the elderly and the children but at what point do we say this is too much?*

*In my own personal life I have pretty much given up on the concept of privacy from these huge companies. I feel like they technically have access to any information they want about me, from what car I drive which isn’t such a private piece of information, to who my friends are, where I like to hang out, what size clothing I wear, how much money I make… basically everything there is to know about me. It scares me that I have zero privacy but I don’t feel like there is anything I can do to stop it.*

**Essay Question II.**

**The rise of digital technology has had a massive impact in the international creative community. Small digital video cameras and editing software have made it easier than ever for aspiring filmmakers to make a movie. Inexpensive recording software has done the same for musicians. Digital photography now rivals the traditional chemical process for resolution, while image manipulation is simpler and more sophisticated than ever before. Ultimately, the Internet provides a worldwide platform for artists of all stripes to share his/her work.**

**What are some of the core characteristics of the digital world? Discuss how these and new tech developments have impacted the arts and creative culture. What are some specific developments that have impacted artists? In what ways are they unrewarding, and in what ways are they beneficial?**

*The internet has changed our world in an infinite amount of ways. One big change has been the ability to share different types of media online. It used to be somewhat difficult to share photos, music and movies. Today the possibilities of sharing are countless. People sharing audio files, pirated movie downloads and snapshots of unique artwork. How has this impacted us? Is this good or bad?*

*First let’s discuss the characteristics of the digital world. Today, with so much artistic work being electronic means that there is no physical copy. This makes sharing very easy. It also allows people to share, edit and collaborate on something because of the ease of sharing the file. Being exclusively electronic presents some issues. Sharing may be too easy which may lead to unwarranted copying of the media. It is also possible that it may be more difficult to tell the difference between the original and the copy. Also being that the files are shared electronically means that the limits on capacity and ability to share have almost no limits because there is so much available space. The content is networked which allows sharing and the content can be interactive. The media is instant and easily accessible. A major distinction between TV and radio sharing and the sharing of media online is that the media online is interconnected and can continuously be edited and shared as opposed to TV and Radio that were seen and heard at a specific time and then that was the end of it.*

*The use of YouTube has been interesting in understanding this issue. YouTube has allowed new amateur video content producers to share their media online and receive feedback. The cameras on our phones have been extremely instrumental in the ability to use platforms like this one. This has also allowed people to record others peoples work and sometimes just share for free which leaves the content creator at a loss or takes claim for something they didn’t create and call the work their own. Speaking of cameras, that has also been a very hot topic in this discussion. Anyone with a phone today can walk into any place, snap a picture and copy someone else’s work. This applies to painting, design ideas and new product ideas. It has also changed the face of film photography which has taken a serious hit in the last few decades with the advent of digital cameras.*

*Using social media to share different types of media has presented its own set of positive gains as well as negative side effects. Social media creates a dialogue. People use it to organize, exchange and collaborate different ideas using social media. The ability to share so freely opens the door for others to edit your content and make it their own without mention of the original artist. These are all big issues. What would motivate someone create content that most likely will be edited from its original state? We see that there hasn’t been a break in artists creating new content. It would be interesting to note why some of them continue to share as freely as they always have.*

**Essay Question III.**

**Human enhancement technology converges nanotechnology, biotechnology, information technology and cognitive science to improve human performance, attempting to temporarily or permanently overcome the current limitations of the human body through natural or artificial means.**

**Discuss some specific developments in human enhancement technology. Do you have trouble with the idea of these technologies making us stronger, faster, better? Do these advancements come at any cost? Such as privacy issues or a question of morals? What are your thoughts on the premise of these technologies making us (humans) more connected to technology? What technological innovation do you think we need most and why?**

*Human enhancement technology is a very interesting subtopic of new technologies. The use of technologies like 3D printing to create prosthetic limbs is absolutely genius. This new technology is far superior than its predecessor. Doctors are able to use scans of the area of the persons missing or currently unusable limb to see what exactly the shape of the new limb is meant to be to fit perfectly in its spot. The ability for dentist to have a 3D printer in their office and print new replacement teeth makes the whole process of getting implants so much smoother. The dentist can take the scans of the current tooth or the negative space of where the tooth was ad recreate a perfect substitute. This cuts down on time and cost of having to take molds and send them to a lab to have them make the tooth and then possibly getting the new tooth back but having it not fit right. Teeth are only one example of the many types things that can be 3D printed and used as a substitute for something in the human body. Just a short month ago scientist in Tel Aviv Israel printed the first heart made from human cells. This is considered a huge breakthrough in the organ transplant world. What this means is that there is a possibility that in the near future it may be possible to print all different types of human organs to use for organ transplants. This would be an incredible feat because it means people would no longer need to wait on a line for an organ to become available. These doctors say that there is a lot that needs to be done before they start to put these new organs into humans but this is definitely a big step in the right direction.*

*Scientists are also discussing the possibility to 3D print prescription drugs. This idea seems like it has the potential to backfire terribly. How will the drugs stay regulated? Will people know if they are taking or printing the correct drug? The potential mishaps seems very large in prospect. It seems like a very dangerous concept. Lee Cronin, a chemist, said he wants to do for distribution of drugs what apple did for ITunes music.*

*In addition there have been incredible advances in technology in which a tiny implant is placed on a person’s brain which records the sound of the brain waves of specific functions in order for neuroscientists to be able to recreate these functions in different ways because of the person’s handicap or limitations. These scientist have also created a human retina which enabled a women who had been born blind to be able to see. These advances sound fabulous but we don’t really know the long term effects of how these foreign objects will continue to function in the human body over time.*

*Michael Chorost is quoted to have said that the future is not about giving our bodies ways to do things they already do, it’s more about having our bodies do things entirely new. He is working on technology he calls telempathy in which human beings will be able to understand another person’s thoughts or feelings. This idea sounds very cool, but at the same time potentially very dangerous. I think that with all new technology the original idea is presented in a very broad way, in which the scientist convince you that we absolutely need this new technology and we can’t live without it anymore. I am not so convinced. The mind reading concept seems to have crossed privacy borders. If we were meant to be able to read other people’s minds then our bodies would have been fashioned in a way that we would be able to do these things. I think the ability to help people do functions that are normal for humans that for whatever reason the person is incapable of doing on their own is incredible but to have our bodies do completely new things does not sit right with me. There is an episode of Black Mirror where they depict a life where people have the ability to rewind their lives and rewatch it. The main character in the episode becomes obsessed with a specific point and rewatches it hundreds of times causing him to act erratically. At the end of the episode you see him cut the implant out of himself because it was making so crazy. As I said before I firmly believe that if we as humans were meant to have these sorts of functions then our bodies would have been created that way. I don’t think that we can make the human body stronger, faster or better, it was created perfectly. No scientist can recreate all of our systems and structures that perfectly. I think when we start to mess with the functions and capabilities of our bodies we may be shifting ourselves from human being to robots or machines.*

*Works Cited*

DeFelice, A. “255\_WEEK09\_UXD”. Kiely Room 315, Queens College, NY. 26 Mar 2019. Powerpoint/Lecture.

DeFelice, A. “255\_WEEK10\_TECH&ART”. Kiely Room 315, Queens College, NY. 2 Apr 2019. Powerpoint/Lecture.

DeFelice, A. “255\_WEEK12\_CREATIVE-FUTURE-THINKERS”. Kiely Room 315, Queens College, NY. 16 Apr 2019. Powerpoint/Lecture.

Brooker, Charlie. *Black Mirror: The Entire History of You*. *Black Mirror: The Entire History of You*, Charlie Brooker, 18 Dec. 2011, www.netflix.com/search?q=black mirr&jbv=70264888&jbp=1&jbr=0.

Festival, World Science. *YouTube*, YouTube, 1 Oct. 2014, www.youtube.com/watch?v=w5-HrUt6M7M.

“Israeli Scientists Create World's First 3D-Printed Heart Using Human Cells.” *NBCNews.com*, NBCUniversal News Group, 19 Apr. 2019, 12:11, www.nbcnews.com/mach/science/israeli-scientists-create-world-s-first-3d-printed-heart-using-ncna996031.