Andrew Harrison

Bibliography #2

Dr. Stringfellow

Seminar Social Responsibility

02/01/2023

Ethical, Cultural, and Legal Issues in Computing

[1] R. Hedges, G. Gottehrer, and H. Francis IV. “Artificial Intelligence and Legal Issues.” Litigation, Vol. 47. No.1. pp11-13. Fall, 2020. https://web-s-ebscohost-com.msutexas.idm.oclc.org/ehost/detail/detail?vid=3&sid=3b2d4373-b85c-497a-b6cd-1422ece6f1a5%40redis&bdata=JkF1dGhUeXBlPWlwLGNvb2tpZSx1aWQmc2l0ZT1laG9zdC1saXZlJnNjb3BlPXNpdGU%3d#AN=146592640&db=a9h [Accessed: February 3, 2023]

- With the world changing as much as it is, the legal system is now finding a way to adopt artificial intelligence into itself. However, this is resulting in many legal issues. One such legal issue discussed is how artificial intelligence is a "black box," which means that the algorithms used are so complex that the people affected by the program can’t even understand the program itself. The algorithms aren’t allowed to be disclosed because of the protections they have with the companies that own them. Since these complex algorithms can't be disclosed, the government can't regulate them like it needs to. Bias and discrimination can also result in legal issues with artificial intelligence. Some studies discussed talked about how when white men were strictly used for facial recognition, the system was able to identify a white man with ease. However, when it came to women and people of color, the system had issues identifying them. Some programmers don’t even realize that they are putting racial or gender biases into their code, which begs the question. What if a biased algorithm is used for legal decisions? An example of legal issues regarding artificial intelligence comes from State v. Loomis. During this trial, a tool was used to determine what kind of risk Loomis would be for becoming a reoffender. Loomis was then sentenced to prison time. Loomis tried to challenge the use of the tool, saying he was denied due process. The algorithm used was considered a "black box" algorithm, so it was considered information that could be ignored by the judge if they wanted to. This example raises the question, "What if the algorithm had been biased and the judge still used the result?"

[2] J. Lai, N. Widmar. “Revisiting the Digital Divide in the COVID-19 Era.” Applied Economic Perspectives and Policy, vol. 43. no.1. July, 2020. https://onlinelibrary.wiley.com/doi/epdf/10.1002/aepp.13104 [Accessed: February 02, 2023]

- Due to the COVID-19 pandemic, the United States had to put many restrictions and regulations in place for quarantining. Because of this, almost all workplaces, schools, and social gatherings had to turn to the internet. This is a cause for concern due to the digital divide in the United States. Some places, especially places in rural areas, have had a much more difficult time accessing the internet during COVID-19. A study showed that only 51.6 percent of Americans living in rural areas had access to internet speeds that averaged 250/25 megabits per second. However, 94 percent of Americans that lived in urban areas had internet access during the same time. To better understand the relationship between internet access and rural areas, the Measurement Lab (MLab) studied speed data with the Rural-Urban Continuum Code (RUCC). RUCC takes the county's population and sizes it from 1 to 9. With this, they concluded that when the county is more rural, internet speeds have a moderately negative relationship. To help with the lack of internet access, some school districts have come up with amazing ideas to help students get the internet access they need. These districts would have a fleet of buses and put them on rotating schedules with WIFI hotspots on them. By doing this, they could allow the student who was up to 200 feet away from the bus to have internet access for a period of time.

[3] B. Stahl. “Ethical Issues of AI.” Artificial Intelligence for a Better Future, pp 42-60. March, 2021. https://link.springer.com/chapter/10.1007/978-3-030-69978-9_4#citeas [Accessed: February 01, 2023]

- A Delphi study, which is a methodology that helps find solutions to complex and multi-faceted problems, was performed, in which forty-one people had usable answers. These people were asked what they thought were the three biggest ethical issues with artificial intelligence. The results of this case study showed thirty-nine different ethical issues, such as the cost of innovation, the "awakening" of AI, bias and discrimination, and many more. This Delphi study allows you to then group these thirty-nine questions into three main categories. You have your questions that can be grouped with machine learning, questions that can be grouped with metaphysical or reality issues, and lastly, questions that can be grouped with general questions about the digital world. A few ethical concerns that were discussed with machine learning are data and privacy protection, bias and discrimination, and safety concerns, such as the safety and protection of autonomous machines. General questions about living in a digital world had a few ethical concerns, such as unemployment: will artificial intelligence take people's jobs away, and if so, what does that mean for our economy? Another issue discussed was how artificial intelligence has ethical concerns with the legal system and how it can be impacted by bias and discrimination. The metaphysical issues discussed don’t really need to be of the highest concern. The reason for this is that progress in artificial general intelligence is extremely slow. This category of ethical issues is more for deep thought issues, such as whether computers can be responsible or if artificial intelligence has morals.