Final Submit.pdf

by Nivan Akash De Silva Wijethunga Goonasekara

Submission date: 07-Oct-2021 08:24PM (UTC+0100)

Submission ID: 160400898

File name: 96841_Nivan_Akash_De_Silva_Wijethunga_Goonasekara_Final_Submit_1194815_2027392490.pdf (245K)

Word count: 2193

Character count: 13352

RISK ASSOCIATED WITH ARTIFCIAL INTELLIGENCE

CIS6004 Professional and Ethical Issues in IT – Group Work Shop 2021

8th October 2021

Aim:

Conduct research to identify the ethical, legal and professional issues associated with AI and it effects in the business sector.

Table of Contents

Objectives: 2

Workshop Plan 2

Introduction 3

Ethical issues with Artificial intelligence 4

- Unemployment 4
- Inequality 4
- AI Security 4
- AI Bias 4
- Control over AI 5

Legal issues with Artificial Intelligence 6

- Human Rights 6
- Contracts and Liability 6
- Data Privacy 6
- Intellectual Property 6

Conclusion 7

References 7

Objectives:

- To Identify and raise ethical awareness of AI.
- To understand what artificial intelligence is and also to identify the different types of AI.
- To Identify Legal and Ethical issues associated with AI
- Identify Security and Privacy issues associated with AI
- To critically analyze different challenges, ethical and legal issues related to the AI in Healthcare.

Workshop Plan

<table>
<tr><td colspan="2"><u>Goal</u>
Conduct research to identify the ethical, legal and professional issues associated with AI and it effects in the business sector.</td></tr>
<tr><td colspan="2"><u>Group Members</u>
CL/BSCSD/22/66 - Nivan Akash De Silva Wijethunga Goonasekera
CL/BSCSD/22/68 - Kishakar Suresh Kumar</td></tr>
<tr><td>Name</td><td>Allocated Tasks</td></tr>
<tr><td>Akash</td><td>➢ Organizing, integrating and managing the group work
➢ Introduction
➢ To identify and raise ethical awareness of AI
➢ To understand what artificial intelligence is and also to identify the different types of AI.
➢ To Identify Legal and Ethical issues associated with AI</td></tr>
<tr><td>Kishakar</td><td>➢ Objectives
➢ Identify Security and Privacy issues associated with AI
➢ To critically analyze different challenges, ethical and legal issues related to the AI in Healthcare</td></tr>
</table>

Introduction

Artificial Intelligence (AI) is the side of computer science that is interested in building machine and programs that are capable of performing actions and tasks that require human intelligence to otherwise do. The three types of AI are

- Artificial Narrow Intelligence – The lowest Level of AI and uses machine learning algorithms
- Artificial General Intelligence – The second level of AI and represents machine intelligence
- Artificial Super Intelligence. – The last level of AI and represents machine consciousness.

Many companies incorporate AI technologies to our day-to-day lives to make them easier, but there are a multitude of issues and challenges that we have to be aware. These issues can variegate from ethical to legal issues. We will analyze these ethical and legal issues to get a better understanding of AI in general and also, we will analyze its ethical and legal effects in the healthcare sector to get an in-depth idea of its impact.

Ethical issues with Artificial intelligence

When discussing about ethics in AI there are two aspects that need to be considered, one being the ethical sides that need to be considered when developing AI and the second being the ethic's that the AI will follow when dealing with different tasks.

Unemployment

When AI is introduced to an industry it will make humans obsolete as machine can run 24/7 with minimal maintenance giving company more profits and also costing them less in the long run. Currently one of the major industries this has affected is the automotive industry. The amount of work to be found in this industry has been dwindling since 2015 the penetration of AI technology in this industry has been increasing at a steady pace and is expected to double by 2030 (Johnson, 2021). As per the 1.1 of the ACM code of ethics and professional code of conduct this is in clear violation as it effects the personal security of the livelihood.

Another great example of this would be truck drivers. In the US alone there are over 3.5 million individuals that are currently employed in this industry. When Tesla, Inc. self-driving truck is released to the public, the number of jobs in this industry will be greatly affected.

Inequality

Our current economic system is based on a contribution compensation system meaning we get paid for the amount of contribution we do based on an hour wage. Majority of the companies out there compensate their employees based on the work quality and the number of hours an individual works for. Companies are able to cut down majority of the human work force by implementing AI into their workforce. This is another major concern. As the amount of capital made by individuals would be driven towards companies and individuals that have ownership of an AI. This would violate the 1.4 of the ACM code of ethics and professional code of conduct as this will discriminate and be unfair to individuals that are not in the Software industry. Even in the current market we are able to see that majority of the wealth is accumulated by individual and companies that are in the software industry. Meaning as AI technology is adopted by companies the majority of the money made by selling services or products will be trapped with these individuals or companies.

AI Security

As AI is developed individuals and companies will adopt them into their day to day lives to make it easier. This can pose a huge threat as AI will not be able to do or think like a human. Humans that are willing to break the law (hackers) will be able to use this lack of security for their own personal gain. For example, lets imagine a house that is controlled by an AI bot. If a human manages to gain access to this system, they will be able to break-in to the house and steal goods and sometimes even personal information such as credit card information, biometrics(fingerprints), etc... This will violate 1.6 of the ACM code of ethics and professional code of conduct as this would be a violation of privacy.

AI Bias

With great power comes great responsibility. AI is able to process a great amount of data at great amounts of speed than an average human. Although this is true, we must know that AI cannot always be trusted and ethical. This is because it is programmed and trained by humans no matter what, it can always be trained to be bias on certain criteria. This will violate 1.4 of the ACM code of ethics and professional code of conduct as it would discriminate a person based on their skin color or ethnicity for example, googles photo service uses an AI algorithm to identify people, object, and locations. On more than one occasion we have seen that its racial sensitivity has been incorrect or when crime prediction software is used, we see that it will show bias data against black ethnic individuals.

Control over AI

Knowledge is power. The sole reason that humans are on top of the food chain is not because of their sharp claws, or their sharp teeth, it is because of their ingenuity and their intelligence. With the use of intellect humans have managed to best animals that are much stronger and faster than them. This begs the question will humans be surpassed by its own creation one day. Yes, for the foreseen future we might be able to control an AI by pulling the plug but what if it's not the case, an advanced system such as an AI will be able to predict this and counter it.

Legal issues with Artificial Intelligence

The workspace of AI is far and wide ranging from weak AI to strong AI one of the major concerns and issues governments and organizations around the world are facing is keeping up with the complex and ever evolving concept of AI. One thing we must get out of the way is there any regulatory and laws that are implemented for AI. Yes and no, when it comes to weak and narrow AI yes regulations and laws are currently in place but when it comes to Strong AI no it is a sector in AI where not many regulations are created as it is very difficult to say how its turn out will be. Simply put, we have no idea.

Human Rights

One of the major uses of an AI in companies is in HR departments for employee screening and employee management functions such as recruiting, and onboarding. As companies begin to incorporate AI into its workforce a major issue it may present is discrimination and bias. Although AI tools promises of reducing unconscious bias that may distorts in human recruitment it brings its own inherent risk to the employer from discrimination laws as the pubic databases and social media used by the AI will contain information about an applicant's age, religion, race, sexual orientation, or genetic information which cannot be legally asked in an interview. Which will violate the Equality Act 2010 where it states a person cannot be treated unfairly or differently.

Contracts and Liability

As AI is able to be integrated to different aspects of a companies the potential for AI to caused injuries and property damage are ever growing due to the fact that it can act autonomously. This abides the question who would be at fault if the AI decides to do something illegal or wrong, would the company that developed it or the company that is current using it for its services be liable for damage caused. For example, if a self-driving car causes an accident would the car owner / the developing company / the vehicle manufacturing company be at fault.

Data Privacy

Almost all organizations around the world are currently collecting some sort of personal information about its clients and users. With this data collection we must always think and consider the security of it. Many organizations such as Facebook, Google, Amazon, etc... collect and hold a lot of sensitive data about its clients, the above listed organizations are actively using AI algorithms in their businesses. Although there are laws currently in place to regulate the collection of data and it use with AI, we still must think about how safe would it be as it is able to act autonomously. The gathering of data and its use with AI is regulated under the data protection act 2018 chapter 3.

Intellectual Property

When we consider the development of AI, a unique problem it might incur is about intellectual property. These issues can range from protection of AI through intellectual property, ownership of AI, AI Infringement. These come into light as AI is a technology that is developed using prior research and development.

Conclusion

While AI is still a long way off from being life like it is not something that is not possible with the right training and algorithms being written. When such a system is created it will bring into light a new set of problems such as AI rights and thus humans will no longer be the most intelligent creature on this planet

AI has a vast potential to improve the life of all humans for the better if it is implemented in the right way. Yes, there are a lot of downsides to AI being introduced but we must consider that the implementation of any new technology will be negative at first but as it progresses it will always improve the way of life.

References

AAMOTH, D., 2014 . *Interview with Eugene Goostman, the Fake Kid Who Passed the Turing Test*. [Online]
Available at: https://time.com/2847900/eugene-goostman-turing-test/
[Accessed 1 10 2021].

Advani, V., 2021. *What is Artificial Intelligence? How does AI work, Types and Future of it?*. [Online]
Available at: https://www.mygreatlearning.com/blog/what-is-artificial-intelligence/
[Accessed 23 9 2021].

Anon., 2020. *Artificial Intelligence Reshaping the Automotive Industry*. [Online]
Available at: https://www.futurebridge.com/industry/perspectives-mobility/artificial-intelligence-reshaping-the-automotive-industry/
[Accessed 2 10 2021].

Anon., n.d. *StradigiAI*. [Online]
Available at: https://www.stradigi.ai/blog/the-key-legal-issues-in-ai/
[Accessed 2 10 2021].

Bossmann, J., 2016. *Top 9 ethical issues in artificial intelligence*. [Online]
Available at: https://www.weforum.org/agenda/2016/10/top-10-ethical-issues-in-artificial-intelligence/
[Accessed 24 09 2021].

Cath, C., 2018. *Governing artificial intelligence: ethical, legal and technical opportunities and challenges*. [Online]
Available at: https://royalsocietypublishing.org/doi/10.1098/rsta.2018.0080#d3e613
[Accessed 1 10 201].

Elliott, R., 2021. Elon Musk Doubles Down on Artificial Intelligence at Tesla Amid Scrutiny of Autopilot. *Wall Street Journal*.

Johnson, J., 2021. *Global number of cyber security incidents in 2020, sorted by victim industry and organization size*. [Online]
Available at: https://www.statista.com/statistics/194246/cyber-crime-incidents-victim-industry-size/
[Accessed 1 10 2021].

Jr, B. D., n.d. *What will self-driving trucks mean for truck drivers?*. [Online]
Available at: https://www.bbc.com/news/business-56332388
[Accessed 1 10 2021].

Müller, V. C., 2020. *Ethics of Artificial Intelligence and Robotics*. [Online]
Available at: https://plato.stanford.edu/entries/ethics-ai/#MachEthi
[Accessed 4 10 2021].

Niehaus, S. E. & Nguyen, H., 2021. *Artificial Intelligence Key Legal Issues: Overview*. [Online]
Available at: https://uk.practicallaw.thomsonreuters.com/w-018-1743?originationContext=document&transitionType=DocumentItem&contextData=(sc.Default)&firstPage=true#co_anchor_a884106
[Accessed 1 10 2021].

Rodrigues, R., 2020. Legal and human rights issues of AI: Gaps, challenges and vulnerabilities. *Journal of Responsible Technology,* Volume 4.

Stahl, B. C., 2021. *Artificial Intelligence for a Better Future*. Leicester: Centre for Computing and Social Responsibility.

Final Submit.pdf

ORIGINALITY REPORT

15%	11%	7%	13%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to University of Wales Institute, Cardiff Student Paper	2%
2	Submitted to University of Glasgow Student Paper	1%
3	dora.dmu.ac.uk Internet Source	1%
4	Submitted to AUT University Student Paper	1%
5	Submitted to Grenoble Ecole Management Student Paper	1%
6	Submitted to University of Southern Queensland Student Paper	1%
7	Submitted to University of Hertfordshire Student Paper	1%
8	Submitted to RDI Distance Learning Student Paper	1%
9	Submitted to RMIT University	

	Student Paper	1%
10	Submitted to South Bank University Student Paper	1%
11	Rainer Alt. "Electronic Markets on robotics", Electronic Markets, 2021 Publication	1%
12	gupea.ub.gu.se Internet Source	1%
13	steemit.com Internet Source	1%
14	"Chapter 300002 Active Transport", Springer Science and Business Media LLC, 2021 Publication	<1%
15	lib.ugent.be Internet Source	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		