

COSC 244 - Ethics Assignment

Name - Sweta Kumari
Student Id - 1265161

1. Robin Radonich - How well a Deep Learning algorithm can predict driver and customer behaviour.

Robin should forget her personal circumstances and take the right decision. Since the software will predict the human behaviour, there could be ethical implications. According to the ITP code of ethics, "Members seeking Bill of Rights" (section 6.4, page 12), Robin can consult various sources to check whether her job is in the line of ethics. Also, Robin needs to be cautious, as she is a fresh PhD without any industry exposure. She needs to inform the company that this would be her first industry endeavour as stated by IITP code of practice "While striving....accepts the consequences" (section 2.2, page 7). Since she is going to work for a private company, she must ensure that she follows the company's code of conduct (IITP code of practice, section 2.3, first point, page 7). Robin must understand the implications if the company wanted to implement her algorithm, a majority of the company's employee might be non-technical. She could even be sued for the wrong outcome of her algorithm. She should follow the point 6-9, section 2.4, IITP code of practice. Finally, Robin needs to manage her time efficiently since her primary job is as a lecturer and do justice with both the jobs (IITP code of practice, 2.6, third point).

2. Pavle Pesa - To improve the algorithm for the bank loan.

As there is an acute housing crisis going on, the loan must be available to the deserving candidates for e.g. first home-buyer, lower income group etc. Hence, Pavle must ensure that his improved algorithm works as it is intended. The ITP code of ethics (section 1.5) clearly states that communities' interest has to look upon and respect for the individual must be ensured. Further, since Pavle works for a large organisation he needs to keep in mind that any misjudgement by his improved algorithm might impact the financial health of the bank. He should ensure that the algorithm is properly tested before it's implemented. He needs to make sure he follows the proper protocol as stated in the ITP code of practice, section 5.2.5. This especially becomes important since this job is crucial for Pavle and he cannot afford to lose it.

3. Sanja Salopek - Software for the internet-connected toys.

Sanja, who is a mother of two children, can understand that the safety of children is number one priority of any parent. She should be cautious about the software in these toys, which might be used to breach the privacy and safety of the family. She must ensure that her software follows all the eight tenets in section 1.5 of the IITP code of ethics as well as section 3.1 (first point). Already, she now knows that police are interested in using these toys as surveillance equipment to catch drug criminals. In light of this new information, Sanja might be in a dilemma for which she should consult with the higher authorities in the company and take their stand on this issue (IITP code of ethics, section 6.3). Since Sanja's software will be Internet connected

there is a potential risk that it could be hacked by child sex offenders, paedophiles and other criminals to gain access to the child. Sanja must make sure that the consequence of her work and its outcome shouldn't compromise the safety of anyone involved (IITP code of practice, 3.4.1, first point). The software needs to be properly tested and certified before implementing as detailed in section 5.2.5, IITP code of practice. Finally, she should also make sure that her software is a quality product and functions as intended (IITP code of practice, section 5.2.2, first point).

4. Me - To develop software tracking the activity of supermarket employees.

Firstly, as I have not finished my degree yet, so I need to think carefully that the work I am going to undertake comes within the limits of my qualifications and competence (IITP code of ethics, section 4.4). And if I think that I am capable of doing this project and later I encounter any problem outside my competence, I should seek expert assistance (IITP code of ethics, section 4.3, third point). Further, all the employee of the supermarket might not welcome the implementation of tracing software in the workplace. So I need to consult with all employees and come out with ethical resolution as mentioned in IITP code of ethics, section 6.1 and IITP code of practice, section 2.1. In long-term supermarket might find difficult get the new employees on the basis of their employee tracking policy. Therefore, it is necessary to discuss this problem with the supermarket as mentioned in IITP code of practice, section 3.1.4 (first point). In the IITP code of practice (section 5.2.2), it states that in in the situation of developing software that they "strive to cost-effectiveness", so I will make sure that my software is a quality product and functions as intended.