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Navigating Ethical Dilemmas In Computer Science

As someone who wants to work in the computer science field, I know the choices I make won't just affect the code I produce but also impact people, their privacy, and how fair technology is for everyone. Ethics isn't just a nice idea in this field, it's something we really need to take seriously. With things like AI and growing data, computer professionals must be ready to face tough situations and make good decisions. The main ethical problems I expect to run into, how I plan to prepare for them, and how both professional codes of ethics and Bible can help guide me.

Ethical Problems I Expected to Face

One of the biggest ethical problems I think I'll face in computer science is dealing with people's private information. Developers often work with personal data like names, locations and even bank information. If we don't protect that data it may be placed in the wrong hands and cause harm. A study from Pew Research Center found that most Americans about 79% worry about how companies use their data, and 81% feel like they don't have control over it (Auxier et al.). That means it is important for people like me to make sure we handle data carefully as if it was our own.

Another issue is fairness in AI. AI is now used in things like jobs hiring, facial recognition, and loan applications. But sometimes, the data used to train AI systems is biased, which means the Ai might treat some people unfairly without anyone meaning to. According to the World Economic Forum, AI bias can lead to real world discrimination especially against women and minority groups and it often happens because the training data reflects unfair patterns already found in society ("AI Has a Bias Problem"). If we don't take action to fix this, these systems might make life harder for the people they're meant to help.

Lastly, workplace pressure can lead to ethical dilemmas. Some companies might want employees to cut corners to save money or finish faster, even if it means doing something wrong like hiding bugs in the software or using someone's data without their full permission. In 2018, several Google employees resigned after learning the company was helping the Pentagon develop AI for drones, a project they believed went against their values (Kolodny). This shows how real the pressure can be, and how important it is to stand by your beliefs, even when it's hard.

Getting Ready for Ethical Problems

To be ready for tough situations at work, I believe it's important to know the rules of the job and also stay true to my own values and beliefs. One of the best ways to prepare is by learning as much as I can. That means keeping up with regulations, understanding the professional codes of ethics, and learning about new technology. I also plan to read about real-life examples in the tech world, go to workshops or conferences, and learn from more experienced people in the field. My faith plays a big part in how I make decisions. Colossians 3:23 says, "And whatever you do, do it heartily, as to the Lord and not to men, knowing that from the Lord you will receive the

reward of the inheritance; for you serve the Lord Christ." This reminds me to do my best and act with honesty, even when no one is watching me. Even making the right decision is not always the easiest. I feel kind of ready for these challenges, but I know there is still a lot of information to learn. I plan to be honest and clear in my work, pray and ask God for clarity, and stay connected with people who will hold me accountable. By these things, I hope to build strong habits that will help me.

Professional and Biblical Ethics

The ACM Code of Ethics talks about the importance of "avoiding harm" in Principle 1.2. This means we should try not to cause problems whether on purpose or by accident. By being careless or not thinking about what could go wrong. Luke 6:31 "Do others as you would have them do to you." If I wouldn't want my own information shared or judged unfairly by a computer system, then I should make sure I don't create systems that would hurt others in the same ways. Avoiding harm is just not about the rules but also showing kindness and request to others.

The IEEE Code of Ethics includes the rule "Be honest and realistic in stating claims or estimates based on available data." This connects with Ephesians 4:29, which says, "Do not let any unwholesome talk come out of your mouths, but only what is helpful for building others up according to their needs, that it may benefit those who listen." In the workplace, being honest when we write reports, talk about what our software can do, or explain problems with our system. Telling the truth helps build trust with others and shows that we do our jobs in a way that honors God.

Conclusion

Ethical problems in computer science are bound to happen, but they aren't too hard to handle if we're prepared. By learning the rules of our profession, knowing what challenges we might face, and using the Bible to guide us. We can make good choices even when it's hard. Colossians 3:17 says "And whatever you do, whether in word or deed, do it all in the name of the Lord Jesus, giving thanks to God the Father through him." I want to keep that in mind with everything I do, every line of code, every decision, and every project.

Works Cited

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