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## The Ethics of Artificial Intelligence

With the emergence and constant evolution of artificial intelligence, AI has become a lot more commonplace in all areas of life from scientific research, to having fun using it for personal purposes, and in programming where it can be used both in ways that can help assist a programmer and be abused. This will talk about the overall dilemma of AI in programming, how someone could potentially overcome it, my actions and feelings, and certain principles in certain codes of conduct.

Artificial intelligence has become more powerful and commonplace over the years with a popular option being ChatGPT powered by OpenAI. With its availability, it has been used for various useful purposes, one of which is in the field of programming. In programming, it can be used to assist programmers in trying to find an answer to a problem they are trying to solve. An article from The MIT Press Reader explains that when it was found that ChatGPT could turn prompts into actual working code, there was reason for excitement (Reader). However, as it can be tested and is stated in the article itself, the AI that is used isn't perfect and will usually have slight errors in the code it gives back to you. So although AI is a powerful tool that can help programmers with solving certain problems, it can't be used by someone with no programming knowledge as the AI will sometimes give out code that doesn't work as it can contain errors that a non-programmer won't be able to understand. Even for more experienced programmers and companies, AI currently isn't in a state where it can be used to make programs on its own. An

article from GeekWire explains that "AI code assistants are very good at adding code, but they can cause 'AI-induced tech debt" (Soper). This comes back to the first point that AI can be used well to assist programmers as it can create code quickly, however, said generated code is usually sloppy or contains bugs that need intervention to be fixed.

Some people worry about the dilemma of Artificial intelligence taking over programming careers and although they do share valid concerns, I feel that AI won't be able to fully replace programming jobs, especially not in its current state. However, there are still ways that people can try to handle the emerging concern. A way that programmers can be able to deal with the emerging concern would be by following already proven practices. An article from the Institute of Electrical and Electronics Engineers (IEEE) states that "while AI-based assistants can help with code completion and generation, the fundamentals of programming remain: the ability to read and reason about your own and others code, and understanding how your code fits into larger systems" (https://www.facebook.com/IEEE.Spectrum/). This itself shows that even if AI can help with creating code, there are still some principles that are extremely important to have that AI currently just won't be able to achieve. My own opinion about the emergence of AI for programming is that it's a nice tool that can be used to help out programmers but shouldn't be used to attempt to create entire projects. I don't plan on taking any action against the use of AI as I don't feel there is much to worry about yet and I don't use AI personally as I don't have too much use for it at the moment.

There are some principles that all programmers should follow especially with the emergence of artificial intelligence. These codes of ethics can help shape a better future especially if AI becomes more integrated in the cycle of development. One principle from the Association of Computing Machinery's (ACM) Code of Ethics is to, "Strive to achieve high

quality in both the processes and products of professional work" (). By striving to achieve the best quality, everyone can end up with better product results, which can in turn show integrity when it comes to producing a product for consumers. Another principle from the Institute of Electrical and Electronics Engineers' (IEEE) Code of Ethics is to, "To seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, to be honest, and realistic in stating claims or estimates based on available data, and to credit properly the contributions of others" (). Both of these principles work hand in hand to help provide better results in terms of a finished product and also can relate to some Biblical principles. A Biblical principle that provides a similar message to the two above is in Titus 2:7-8 where it states, "In everything set them an example by doing what is good. In your teaching show integrity, seriousness and soundness of speech that cannot be condemned, so that those who oppose you may be ashamed because they have nothing bad to say about us." All three of these principles can give a similar message of trying to set an example by trying to show integrity through what you create by striving to provide others with the best product you can make.

Overall when it comes to the dilemma of Artificial intelligence replacing people in programming jobs, there isn't too much to worry about for a good while. Current AI still requires us to assist with it to fix and piece together what it creates, and if we strive to put our best foot forward, we should be able to have a future that could potentially have both AI and people work together to make finished products.

## Works Cited:

- Reader, The MIT Press. "Will AI Render Programming Obsolete?" *The MIT Press Reader*, 20 Nov. 2023, thereader.mitpress.mit.edu/will-ai-render-programming-obsolete/.
- Soper, Taylor. "New Study on Coding Behavior Raises Questions about Impact of AI on Software Development." *GeekWire*, 23 Jan. 2024, www.geekwire.com/2024/new-study-on-coding-behavior-raises-questions-about-impact-of-ai-on-software-development/.
- https://www.facebook.com/48576411181. "How Coders Can Survive—and Thrive—in a ChatGPT World IEEE Spectrum." *Spectrum.ieee.org*, spectrum.ieee.org/ai-programming.
- ACM. "ACM Code of Ethics and Professional Conduct." *Association for Computing Machinery*, Association for Computing Machinery, 22 June 2018, www.acm.org/code-of-ethics.
- IEEE. "IEEE Code of Ethics." *Ieee.org*, June 2020, www.ieee.org/about/corporate/governance/p7-8.html.