

**CSCI 301 Survey of Scripting Ethics Paper:
Ethics of Artificial Intelligence**

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CSCI 301: Survey of Scripting
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October 26, 2024

The computer Science major at Charleston Southern University covers a vast array of concepts and fields within computer science including cyber security, database management, network management/security, software development, web development, and application development. The degree opens a multitude of careers and pathways to various jobs in the computer science field. Personally, I find myself most attracted to the field of software development. This is very code heavy and works towards the programs and scripts that are bought and used by virtually all aspects of life. From simple things like the software that runs behind the scenes in simple applications in your phone to complex things like international banking systems and even defense systems that help inform ground soldiers or defense systems that identify and intercept threats. Like all career fields, there are codes of conduct and codes of ethics that preside over how to operate and work in a manner that is essentially right or ethically sound. One instance of this would be the Institute of Electrical and Electronics Engineers code of ethics that lays a ground work or baseline of guidelines that allow professionals in the computer science and other related fields to operate ethically in their work, both individually and collaboratively. The essence of this particular code is made quite clear in section one as the assert that the main goal is:

“to hold paramount the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, to protect the privacy of others, and to disclose promptly factors that might endanger the public or the environment”;(IEEE)

Here, it is made clear that in all that a professional does in the computer science field they ought to strive for what is best for the whole in all that they do.

What is best for the field of software development, as well as most other areas of computer science, is whatever makes things more efficient. Whatever helps developers to write

faster, plan better, test deeper, or plan more robustly is considered more efficient and therefore a worthwhile investment. The current focus of such worthwhile investing is that of AI. AI is a rapidly developing tool that is both exciting and concerning to many different professions especially software development. On one hand, many are excited with the prospect of how AI may make a developers work easier as it helps with code generation, automation, and planning for projects and how they may change with time. An article from Baylor University comments on these developing uses for AI as a tool saying:

The integration of AI-assisted software development brings several advantages. It accelerates tasks like code review and debugging, reducing the time required for project completion. AI can also enhance software security by identifying vulnerabilities and suggesting fixes. Moreover, it assists in predicting and addressing issues, resulting in more reliable software(Baylor).

Clearly AI is a way to help developers flourish however, some are concerned that it will possibly lead to a future where developers are either dependent on or replaced by AI where not only would jobs be taken from hardworking dedicated professionals but also could be unreliable for secure and accurate work. However these fears are largely unfounded as experts assert that AI can never replace the “human touch” that human developers possess(Baylor). So then, the focus becomes on how to not become dependent on this new exciting tool while not allowing it to become a crutch to coding or a risk to the integrity of the code written.

The professional world with its codes of conduct and ethics give a clear way forward through this conundrum. As aforementioned in the prior discussion of ethical codes the IEEE code of ethics makes it clear that a quality product that is sustainable and secure. Going deeper, the IEEE asserts that there is a responsibility for professionals to be prompt in disclosing

possible risks and to also be constantly “improving the understanding” of both oneself and others on the capabilities and implications of emerging technology(IEEE). Essentially, the IEE asserts that with a new technology like AI it is vital that professionals stay ahead of the curve educating themselves as well as others about the benefits and risks of AI. Through comprehension avoidance of the possible risks that come with AI becomes much easier to maintain. The Association of Computing Machinery reinforces this attitude with their own code of ethics echoing the responsibility to hold the safety of others as the priority with a need to identify and inform others of the possible risks(ACM 1.3). Simply put, the professional view to this issue is that the safety of others is paramount and that education and communication are vital tools for the preservation of this safety.

While all computer science professionals ascribe to the professional codes of conducts and ethics standards, or at least should, however some hold themselves to a higher standard... a Biblical standard. Those who identify as Christian assert that the highest standard to follow is that given to them by God through Scripture, so what does scripture say about this? Believe it or not the Bible, written centuries ago, does in fact speak on something as modern as AI in the workplace because the Bible is inspired and thereby exhaustive and timeless. In Colossians the Apostle Paul teaches that in all tasks and work that a Christian does they are to do the best of what they have to offer, meaning their effort and commitment and creativity and integrity, because ultimately all that a Christian does is unto God(Col. 3:23-24). Paul, later in Galatians 6 asserts that in their actions a person should test themselves to see if they are in fact doing good and that each person must do their part to care for others(Gal. 6:4-5). Essentially, Paul tells Christians that in everything they do they should strive to give the best of their work and to be vigilant about ensuring that their intentions and efforts truly help others and not just themselves.

Directing this towards AI in the workplace looks like only using AI in a manner that is truly productive allowing for a better product to be produced. If a professional is a good steward of AI in software development it will make way for better code, better testing, better products, and wider access to these tools and products. Proverbs confirms this stating: “A wise man is full of strength, and a man of knowledge enhances his might” further reinforcing the argument that God not only asserts that Christians should work well but that their work is enhanced and flourishes with knowledge (Proverbs 24:5). Christians interacting with AI have a responsibility to be cautious of letting AI diminish their work and yet also cannot ignore it as it is clearly a vital tool for the betterment of their service to God through work.

It can be striking just how similar these two moral viewpoints are considering how different their origins seem. Both the professional standards and the Bible assert that professionals must be diligent in making the best product they can that helps others. Both assert that with all work there must be a duty to look out for and address any risks or issues that may compromise work. Both argue that in striving for the best product possible there is a responsibility to grow and learn to perform better and to labor well. Ultimately both agree that AI should be approached with a desire to improve how one works while also being aware of the risks that could be lurking below the surface of a budding new technology like AI.

In conclusion, the computer science field is full of various roles like that of the software developer who are held to an ethical standard. AI is much like us as it is “fearfully and wonderfully made” bringing both hope of advancement and a risk of unhealthy and unsafe dependence (Psalm 139:14). The professional standards and the Bible assert that professionals and Christians alike must strive to give the best of themselves for the Good of others and that in this responsibility they are to not only be cautious of the risks of AI but also be constantly

engaging with the benefits of AI to improve their own work. Ultimately, tools like AI must be addressed by professionals both in their risks but also in their benefits as all professionals ought strive to improve their work in every way they can especially with the booming benefits of AI.

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