Code Review Journal

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12/07/2024

Two game-changing technologies that I find both fascinating and groundbreaking are artificial intelligence and blockchain.

Let’s start with artificial intelligence, or AI. Once just a theoretical concept, AI has grown into a transformative force in our everyday lives. It’s capable of performing tasks that typically require human-like intelligence, such as problem-solving, decision-making, and language processing. As highlighted by Manyika (2022), AI has transitioned from being an idea to a reality, enhancing various aspects of society.

On the other hand, blockchain was a term I had often heard but didn’t fully understand until I studied it in one of my courses. Although my exposure was brief, it gave me a much clearer perspective on its significance. Blockchain is essentially a decentralized digital ledger technology that records transactions securely across a network of computers. Its core principles—decentralization, transparency, self-verification, permissionlessness, and accountability—create a trust layer that’s accessible to individuals, enterprises, and even governments (CVVC, 2024).

Looking ahead, I aspire to work in a field where I can engage with and maintain technologies that will shape the future. I’m particularly interested in how AI and machine learning can streamline work processes, improve efficiency, and solve real-world problems. At the same time, I see blockchain playing a crucial role in developing decentralized systems and smart contracts. With its growing adoption across industries, there’s a rising need for professionals who can design secure networks and integrate blockchain solutions.

Both AI and blockchain have immense potential to impact individuals, communities, and the world at large. AI can revolutionize sectors like healthcare and education by improving decision-making and operational efficiency. However, it also raises critical concerns, such as job displacement and ethical dilemmas. According to the American Academy of Arts and Sciences, AI could help tackle global challenges but might also risk exacerbating inequality (Manyika, 2022).

Blockchain, in contrast, offers the promise of greater transparency and security. It could transform areas like supply chain management and voting systems, fostering trust in how data is managed. As CVVC (2024) notes, blockchain can promote financial inclusion and reduce corruption by providing a tamper-proof, decentralized ledger. However, like AI, it comes with its own set of challenges, including ethical implications and limitations in recourse.

Reflecting on my progress, I’m proud to have achieved several course outcomes so far. These include developing strategies for fostering collaborative environments that support organizational decision-making in computer science, demonstrating the use of innovative techniques and tools to implement impactful solutions, and cultivating a security mindset to expose vulnerabilities and mitigate risks.

That said, I recognize areas where I can grow further. I want to improve my ability to design, develop, and deliver professional-quality communications that are coherent, technically sound, and tailored to specific audiences. Additionally, I aim to refine my skills in designing and evaluating computing solutions using algorithmic principles, while effectively managing the trade-offs involved in these decisions.

Ultimately, I believe there’s always room for improvement. By continuing to build on these skills, I’m confident I can contribute meaningfully to the fields of artificial intelligence, blockchain, and beyond.

Reference

CV VC. (2024, November 27). *Blockchain: A technology with social impact*. CV VC.<https://www.cvvc.com/blogs/blockchain-a-technology-with-social-impact>

Manyika, J. (Ed.). (2022). *AI & Society*. Dædalus, Journal of the American Academy of Arts & Sciences, 151(2), 5-28.<https://www.amacad.org/sites/default/files/daedalus/downloads/Daedalus_Sp22_AI-and-Society.pdf>