

The Artificial Intelligence Driven Social Work

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Abstract : Our world continues to grapple with a lot of social issues. Economic growth and scientific advancements have not completely eradicated poverty, homelessness, discrimination and bias, gender inequality, health issues, mental illness, addiction, and other social issues. So, how do we improve the human condition in a world driven by advanced technology? The answer is simple: we will have to leverage technology to address some of the most important social challenges of the day. AI, or artificial intelligence, has emerged as a critical tool in the battle against issues that deprive marginalized and disadvantaged groups of the right to enjoy benefits that a society offers. Social work professionals can transform their lives by harnessing it. The lack of reliable data is one of the reasons why a lot of social work projects fail. Social work professionals continue to rely on expensive and time-consuming primary data collection methods, such as observation, surveys, questionnaires, and interviews, instead of tapping into AI-based technology to generate useful, real-time data and necessary insights. By leveraging AI's data-mining ability, we can gain a deeper understanding of how to solve complex social problems and change lives of people. We can do the right work for the right people and at the right time. For example, AI can enable social work professionals to focus their humanitarian efforts on some of the world's poorest regions, where there is extreme poverty. An interdisciplinary team of Stanford scientists, Marshall Burke, Stefano Ermon, David Lobell, Michael Xie, and Neal Jean, used AI to spot global poverty zones - identifying such zones is a key step in the fight against poverty. The scientists combined daytime and nighttime satellite imagery with machine learning algorithms to predict poverty in Nigeria, Uganda, Tanzania, Rwanda, and Malawi. In an article published by Stanford News, Stanford researchers use dark of night and machine learning, Ermon explained that they provided the machine-learning system, an application of AI, with the high-resolution satellite images and asked it to predict poverty in the African region. "The system essentially learned how to solve the problem by comparing those two sets of images [daytime and nighttime]." This is one example of how AI can be used by social work professionals to reach regions that need their aid the most. It can also help identify sources of inequality and conflict, which could reduce inequalities, according to Nature's study, titled The role of artificial intelligence in achieving the Sustainable Development Goals, published in 2020. The report also notes that AI can help achieve 79 percent of the United Nation's (UN) Sustainable Development Goals (SDG). AI is impacting our everyday lives in multiple amazing ways, yet some people do not know much about it. If someone is not familiar with this technology, they may be reluctant to use it to solve social issues. So, before we talk more about the use of AI to accomplish social work objectives, let's put the spotlight on how AI and social work can complement each other.

Keywords : social work, artificial intelligence, AI based social work, machine learning, technology

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