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COMMENTARY

Considering artificial intelligence in hiring for cybervetting purposes

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Artificial intelligence (AI) is taking an increasingly more prominent role in the hiring process (CareerBuilder, 2017; Leicht-Deobald et al., 2019). As the use of AI gradually becomes a regular and unreflective undertaking, like the trend observed for cybervetting in a recent focal article (Wilcox et al., 2022), debate is emerging as to the ethical implications of using AI to determine a candidate's fate (Du, 2022). Overall, individual characteristics that the algorithm recognizes as unsuccessful or unfitting, simply because it follows historical data, can fully disqualify even the most competent candidates (IBM, 2018; Tambe et al., 2019). For example, a recent news article (Huet, 2022) highlighted that AI can bias the cybervetting and overall recruitment process, affecting women and minorities to a greater extent because these groups were underrepresented in the workplace in the past. Furthermore, recent findings also suggest that job applicants and hiring managers alike perceive that using AI in hiring is not ethical across the board (da Motta Veiga et al., 2022). Specifically, this work indicates that when AI is used to analyze job applicants' social media presence and activity, ethical perceptions toward the hiring organization are very low both for job applicants ($M = 2.55$) and for hiring managers ($M = 2.67$), reported on a 5-point scale. When compared with using AI for other hiring methods, this ranks as the second lowest, only second to using AI to analyze facial expressions during interviews. Overall, both job applicants and hiring managers perceive that using AI to analyze job applicant's social media is not ethical.

Artificial intelligence and cybervetting: Benefits and downsides

The gap that prevails between human resources (HR) practices and ethical concerns about the use of AI in the hiring process made us ponder whether and how AI could be beneficial in terms of cybervetting job applicants and whether AI could be designed in a more positive manner that would allow job applicants and hiring managers/organizations to trust the use of AI to cybervet prospective employees. We thought of a couple of ways in which AI could be helpful for cybervetting purposes and in the hiring process more broadly.

First, perhaps the use of AI to cybervet job applicants could take place earlier in the hiring process, to compare multiple candidates who are being considered for the position instead of waiting until there are only one or two finalists to cybervet them. For example, AI could be used to cybervet candidates based on their application documents, which is perceived as a more ethical way to use AI in hiring ($M = 3.60$; da Motta Veiga et al., 2022). AI could thus become a component of the earlier steps of hiring process through which hiring managers can, for example, cybervetting whether applicants are being truthful with their application documents as well as with information related to their background and fit with the position and organization.

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This strategy would be conducive to collecting applicant data about overall characteristics relevant to the job and the organization.

A second way in which AI could be used for cybervetting purposes, while also mitigating some of the privacy concerns raised by Wilcox et al. (2022), would be to aggregate applicants' social media data collected by AI. This score would then become one hurdle of the hiring process, along with other prominent factors such as job–person fit (Figueroa-Armijos et al., 2022). More specifically, to be both ethical and efficient in using AI for cybervetting purposes, hiring managers could use AI-enabled tools to gather internet and social media information about multiple candidates (i.e., finalists for a job opening), keep that data and information at the aggregate level (e.g., use a scoring system about person–job and person–organization fit rather than just "looking for red flags"), and thus be able to compare job applicants in a more objective manner. A clear opportunity to use AI in cybervetting is the potential to create scoring systems that would keep the social media and internet information private while only providing a summary of the activity or a score based on criteria determined vital by the organization and around which the AI will be designed. Unfortunately, one major problem remains in that the AI is created by humans who are inherently biased (Jasanoff, 2016) and by organizations who have their own profitability goals at stake (Brynjolfsson & McAfee, 2014). Furthermore, as mentioned earlier, there are also risks related to inherent biases against women and minorities (Noble, 2018; O'Neil, 2016), which warrant an industry-wide collaborative approach.

To provide a more concrete example of the above-described approach would be for the organization to create a score that builds on the diversity of the data collected to determine a job applicant's level of authenticity (i.e., an increasingly sought-after characteristic; Cha et al., 2019). The organization would thus create an algorithm to allow hiring managers to capture that aspect of a job applicant's personality, based on their social media and internet activity. This posits, though, another important question. Are people authentic on social media? How can this be accurately measured?

Although we proposed a couple of ways in which AI can be helpful for cybervetting purposes, we also acknowledge some of the inherent downsides of using AI in cybervetting—namely the increased lack of privacy and the instrument deficiency in what the AI is meant to capture. First, although we argue that AI can be leveraged to help protect one's privacy by only providing aggregated data about job applicants, there is also the unspoken risk that organizations might use AI to get information about a job applicant's personal and professional life, beyond what is strictly necessary. The gatekeeper in this case would be the person in charge of designing the algorithm to gather the required information while keeping it as private as possible. Second, and related to the issue around the person who designs the AI, is that organizations are likely to commission one of their employees or outsource this task to create an AI system that captures various characteristics about job applicants based on their social media and internet information. This critical step would unequivocally need to be scientifically tested to ensure that the AI is capturing what it is intended to and that there is no measurement deficiency or contamination (Murphy & Shiarella, 1997).

Conclusion

Although we believe that AI can provide an avenue for hiring managers and organizations to cybervet job applicants without violating applicants' privacy, there is still a lot of work to do. We believe that two major axes of work are to implement the use of AI earlier in the hiring process and to make this use of AI more purposeful than simply identifying "red flags" about job applicants. Therefore, organizations could start by formalizing AI cybervetting as a stage of the hiring process, where information from various candidates is gathered at an aggregated (i.e., composite score) level that lawfully protects individual privacy. Furthermore, and related to the idea of aggregated data, would be to design an algorithm that captures individual characteristics from social

media and internet that are relevant to the job and the organization. Such an algorithm would be most fruitful if built as an industry-wide collaborative effort, transparent with respect to its ethical foundations. After this step is accomplished, organizations could then design AI systems that would gather such information and score job applicants on those facets in the same way they conduct personality, skills, and integrity tests. Social media and the internet are not going anywhere, and although institutions are doing their best to protect individuals' privacy, there is a lot of information and data out there. So, let's be smart and ethical in the way we use this data in the context of cybervetting prospective employees using AI. This can become a more productive, ethical, and respected aspect of the hiring process.

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