

# The Use of Artificial Intelligence to Recruit Employees

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## Abstract

Artificial intelligence (A.I.) has begun appearing in several forms throughout the employee recruitment process. Chat bots are used to communicate with potential employees. A.I. is used to sort through résumés, which will affect how résumés are written. Companies are using technology to assess the personalities of candidates. Certain companies with more capital are able to conduct virtual interviews and have

them analyzed. Using various A.I. forms, companies can improve the efficiency of the recruiting process and create a better recruiting experience for the candidate. The drawback of A.I. is that its knowledge is limited to the code in its program, and it is unable to function outside of those limitations.

## The Use of Artificial Intelligence to Recruit Employees

Companies now use artificial intelligence (A.I.) to recruit employees. A.I. recruitment can involve using chat bots, conducting résumé assessments, creating personality profiles, and conducting virtual interviews. These A.I. forms increase the efficiency and effectiveness of the recruiting process. This paper will explore the various ways that companies utilize A.I. in the recruiting process, as well as the advantages and disadvantages of implementing A.I.

### Using Chat Bots

Chat bots are a way for companies to simulate human interactions through online communication such as text or e-mail. This is a simple way for a company to start implementing A.I. into its recruiting process. Chat bots are one of the more cost-effective uses of A.I., because they do not require as much computing power or as many databases as the other options. Chat bots communicate with job candidates through automated messages.

McDonald's uses chat bots to inform previous candidates on their 18th birthday that they are now eligible to reapply (Wedl, n.d.). This allows McDonald's to capitalize on those missed opportunities of the past. McDonald's does not have resources to assign someone to continuously look at past applications to see when someone has turned 18. Without the use of a chat bot, those past applications would probably not be looked at again. Other companies use chat bots to inform candidates when they have moved on to the next stage of the recruiting process (Wedl, n.d.). These implementations of A.I. may not seem extraordinary, but they save the company time and money.

## Conducting Résumé Assessments

Résumés used to be sent to the hiring manager to be assessed. With A.I. taking over résumé assessments, the importance of these documents has shrunk (Artificial Intelligence, n.d.). When a human looks at a résumé, that person can make connections or have an understanding of the job candidate's experience. A human recruiter can make personal connections through someone's résumé; A.I. cannot. Robot assessment of résumés makes the result strictly fact-based. A.I. assesses a résumé by searching for keywords and comparing those to the preferred knowledge or experience that the company is looking for (Wedl, n.d.). After it compares keywords, the A.I. sorts and selects candidates who meet the most requirements and would be the best fit based on the data in the résumé (Yoong, n.d.).

## Creating Personality Profiles

Some companies look at candidates' social media profiles to see if their posts are appropriate for someone who works for the company. Schellmann states, "As soft skills gain importance, more employers will use AI to create personality profiles, generated from job candidates' social-media profiles, LinkedIn accounts and other text posted online ..." (2020). Instead of a person doing the research and deciding for themselves if this candidate is the right fit based on their online information, companies are able to gather that information and allow A.I. to do the rest.

The A.I. is programmed with a variety of traditional personality tests (Schellmann, 2020). Once the company inputs the candidate's online information into the system, it will produce an analysis of their personality. This allows the

company to have an understanding of what the person is like, based on the information they post online.

### **Conducting Virtual Interviews**

A.I. is now able to conduct interviews and assess a candidate's interview performance. The company that is leading this form of A.I. is HireVue. According to research from Harvard Business School, "HireVue records job candidates' interviews and analyzes their facial movements, word choice, and speaking voice" (HireVue, 2020). The video recording of the interview is analyzed by A.I. and then compared to the performances of the company's top employees. After the two interviews are compared, the system creates a measurement for how well the candidate did in various categories (HireVue, 2020).

### **Advantages of Artificial Intelligence**

A.I. benefits both the employer and candidate. It benefits the employer because it is a cost-effective way of conducting the recruitment process. The companies do not have to pay A.I. to work, and it can work 24/7. A.I. also gives human resource workers more time to focus on more valuable tasks. It benefits the candidate by reducing the amount of human bias during the process, offering candidates instantaneous feedback, and speeding up the recruitment process (Yoong, n.d.). The recruitment process takes 1 to 2 weeks with a human recruiter, but with an A.I. recruiter, it takes only 1 to 2 days because it works continuously and is able to instantly assess information (Wedl, n.d.).

### **Disadvantages of Artificial intelligence**

A.I. is limited to the coding in its program, which makes it hard to compare the experiences of one candidate to another (Yoong, n.d.). There is more to a résumé than strictly facts, and sometimes a résumé needs to be looked at for more than facts. "If personality profiling becomes more prevalent, a market for algorithms that assist applicants in burnishing their social-media histories and other online accounts could spring up," according to Schellmann (2020). With social media playing such a big role in today's society, that could have effects. Another disadvantage is that human bias can get into the coding of artificial intelligence. Humans create the code, so whether they do it on purpose or not, their biases can be implemented.

Amazon secretly used A.I. to recruit employees and later found out that the system had a bias against women (Dastin, 2018). Dastin explains, "Amazon's computer models were trained to vet applicants by observing patterns in résumés submitted to the company over a 10-year period. Most came from men" (Dastin, 2018). This caused the

program to penalize female candidates, assuming that they were less qualified. HireVue had a similar problem related to human bias. After HireVue was audited, it was recommended that the company stop its A.I. virtual interviews, based on skepticism and potential human bias within the program (Kahn, n.d.).

### **Conclusion**

A.I. can compute information instantly and more efficiently than humans can. Using A.I. reduces the amount of human bias in the recruiting process, but it can still have human bias within its code. Chat Bots are used for simple communication to mimic human communication. Keywords are important in résumés in order for A.I. to pick up the information. Interviews that are done virtually can be recorded and analyzed by artificial intelligence. Personality profiles can be made during the recruitment process, based on the information posted on a person's social media accounts.

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