

Generative AI for Organizational Behavior: Use Cases of Generative AI in Talent Recruitment

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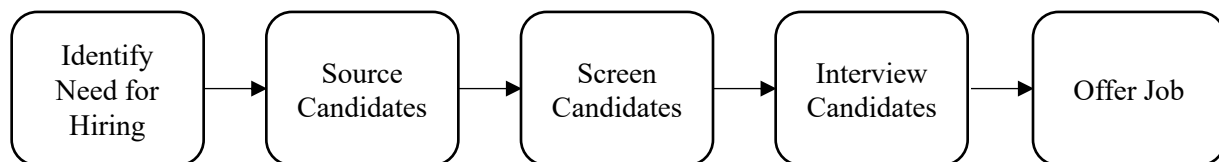
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Introduction

One of the most important decisions in organizations that shape organizational behavior and performance is hiring. This is obviously because hiring the right people will increase the chances of getting the organization's work done right. At the same time, managers often point out that hiring is one of the most challenging tasks they face. The difficulties can be contributed to several factors such as identifying the key areas to hire in, attracting qualified candidates, dealing with talent shortage, promoting diversity, and reducing time-to-hire. But what if a very intelligent assistant called 'generative AI' can help managers navigate through some of these challenges? In this article, I introduce some applications of generative AI that could be useful for the recruitment process in organizations. I will provide specific examples, along with a discussion of the risks and limitations of the technology. Just to be clear from the outset, generative AI should be used as a tool that assists hiring decisions, not the one that makes the decisions.

The Recruitment Process in Organizations and its Challenges

A typical recruitment process in organizations involves the following steps.



First, the organization must identify the areas in which it needs to hire new employees. Sometimes this step can be straightforward. A long-standing employee may be retiring and needs to be replaced by someone who can fill the same role. Alternatively, there could be a lack of hands in a certain area in of the organization (e.g., cashiers, salespeople, drivers, etc.) and therefore more personnel needs to be hired in that area. However, what if a company is diversifying into a new business? What if a company wants to explore a new technological area? What if an entrepreneur is trying to figure out how to form a founding team? In these latter scenarios, identifying necessary job positions, responsibilities, and qualifications are not so straightforward and can entail hurdles such as long periods of research, costly consultation, or multiple rounds of trial-and-error. But what if an intelligent assistant can provide a reasonable starting point for this search process? In particular, what if it could provide suggestions on what type of job roles will be needed to carry out a novel task for the organization?

Second, the organization has to source potential candidates. One of the most critical tasks in this step is crafting a job description. An effective job description can help do at least two things. One, it can deter unsuitable candidates from applying. This becomes especially important in situations where there is more supply of job candidates than demand, and there is only limited time and resources for managing the hiring process. Two, it can attract and entice more qualified job

candidates. This is especially helpful in scenarios where significant labor shortages exist. According to data provided by the U.S. Chamber of Commerce in 2023¹, durable goods manufacturing, wholesale and retail trade, and education and health services are examples of industries experiencing serious labor shortages where there are more unfilled job openings than unemployed workers with experience in their respective industry. Notably, even in industries that do not have labor shortage issues, the rise in remote work has made sourcing qualified candidates challenging for managers. Moreover, there are rising concerns related to promoting diversity in workforces and thus crafting a job description that is inclusive would also be an important consideration. Given these constraints, where does a hiring manager begin? Of course, filing through job descriptions that have been previously used internally or searching for recent job descriptions posted by competitors could be a reasonable starting point. But what if an intelligent assistant can create a high-quality first draft of a detailed job description in a matter of seconds? What if it can also tailor subsequent versions of the document in ways that fits the organization's needs?

Third, the hiring process involves screening the most qualified candidates (at least on paper). The challenge in this step is usually the sheer number of applications that needs to be reviewed. If the job is a simple one and the applications are short, this is less of an issue. However, what if it is a more complex job, for which candidates are required to submit lengthy applications explaining their qualifications? What if it is a job that requires multiple qualifications and therefore a comprehensive assessment of the candidate is necessary? And, most importantly, what if there are hundreds of these applications and the hiring decision has to be made in a short period of time? Importantly, it has been strongly advised that generative AI should *not* be the ones ranking applicants or recommending who the final interviewees should be. This is due to the inherent biases that may exist in the data that they were trained on.² However, what if the system could condense a four-page candidate statement into a one-page summary of the candidate using bullet points within seconds? What if it can also quickly highlight the strengths and weakness of a candidate according to criteria provided by the hiring manager?

Fourth, candidates who pass the screening phase are often interviewed. Interviews are meant for verifying the candidate's experience, knowledge, and skills, and for assessing the individual's fit with the company. Accordingly, the question that arises in this step is, "What are good interview questions to ask the candidate?" Often the organization will have a general set of questions that they have been using all along. However, what if the organization is hiring someone for a new role? What if the organization wants to explore new interview questions to fill an existing role with a better candidate? And finally, what if the organization wants to ask questions that can test the candidate's technical skills and logical thinking skills in a certain domain?

As discussed above, there are inherent challenges in the steps leading up to a final offer in the hiring process. Generative AI may not be able to solve all the challenges, but at least it can offer an excellent initial point of reference. In the next section, I briefly describe the tasks in which generative AI generally has exceptional capabilities in (compared to humans and existing search engines such as Google) and present some examples that address the questions I posed above.

¹ <https://www.uschamber.com/workforce/understanding-americas-labor-shortage-the-most-impacted-industries>

² <https://www.reuters.com/article/us-amazon-com-jobs-automation-insight-idUSKCN1MK08G>

Generative AI as an Assistive Tool in the Recruitment Process

Generative AI is a form of artificial intelligence that can generate text, images, or other media based on the data they were trained on. In particular, generative AI models called large language models (LLMs) are ones that can understand and generate natural language (e.g., language in the way humans use it), based on its training on trillions of words and the connections between them. ChatGPT (<https://chat.openai.com>) is one of the most representative LLMs, which has instantly attracted an enormous user base since its release in November 2022, due to its extremely convenient user interface which allows users to ‘converse’ with the system in a simple chat format. Among all the things it is capable of doing, ChatGPT is especially competent in promptly handling extensive datasets to offer tailored recommendations, crafting personalized text content, assessing sentiment and tone in text, summarizing lengthy passages, and generating relevant questions and solutions pertaining to a given topic. These are exactly the capabilities that can help hiring managers do their jobs in a much more efficient way. Below, I provide examples of hiring-related tasks that can be done using ChatGPT (currently the most user-friendly form of generative AI).

Example 1: Identifying Hiring Needs for a New Business

Let’s imagine that a start-up company located in Pittsburgh wants to hire engineers that can help them develop self-driving software. What kind of engineers would be needed for such job?

Prompt:



I am a start-up company in Pittsburgh. You are an expert hiring manager in the self-driving car industry. What are the types of engineers I need to hire to develop self-driving software for cars?

Response (not shown in full to conserve space):



To develop self-driving software for cars, you'll need a diverse team of engineers with expertise in various domains. Here are some key types of engineers you should consider hiring for your startup in Pittsburgh:



1. **Software Engineers:**

- **Computer Vision Engineers:** These engineers specialize in creating algorithms that allow the vehicle to interpret and understand the visual data from cameras, LIDAR, and other sensors.
- **Machine Learning Engineers:** They focus on developing machine learning models to improve the decision-making capabilities of the self-driving software.
- **Robotics Engineers:** Robotics experts can help in developing algorithms for motion planning and control, enabling the car to navigate safely.

2. **Sensor Fusion Engineers:**

- These engineers work on integrating data from multiple sensors (e.g., cameras, LIDAR, radar) to create a comprehensive and accurate perception system for the vehicle.

3. **Localization Engineers:**

- They work on developing algorithms and systems that allow the vehicle to determine its precise position on the road.

4. **Mapping Engineers:**
 - Mapping engineers create and maintain high-definition maps that are essential for self-driving cars to navigate and make informed decisions.
5. **Control Engineers:**
 - Control engineers focus on developing control algorithms that ensure the vehicle can navigate safely and smoothly in different situations, such as lane-keeping and adaptive cruise control.
6. **Embedded Systems Engineers:**
 - These engineers are responsible for implementing the self-driving software on embedded systems within the vehicle, ensuring it can operate in real-time.
7. **Safety Engineers:**
 - Safety engineers are crucial for ensuring the self-driving software meets rigorous safety standards and is reliable in all conditions.
8. **Simulation Engineers:**
 - Simulation engineers develop virtual environments and testing frameworks that allow you to test and validate your self-driving software in a controlled and safe manner before real-world deployment.
9. **Data Engineers:**
 - Data engineers are essential for managing and processing the vast amounts of data generated by self-driving vehicles during testing and operation.
10. **Cybersecurity Engineers:**
 - Given the potential security risks associated with autonomous vehicles, cybersecurity experts can help protect your software from cyber threats and ensure the safety of your self-driving system.
11. **AI Ethics and Compliance Specialists:**
 - These experts can help your company navigate the ethical and regulatory challenges associated with self-driving technology.
12. **Human-Machine Interaction (HMI) Engineers:**
 - HMI engineers work on developing user interfaces and communication systems that allow passengers to interact with the self-driving car and understand its actions and intentions.

 Regenerate

As shown above, with a simple prompt from the user, ChatGPT instantly generates a comprehensive list of essential roles required for the development of self-driving software, accompanied by explanations for why they are needed. It is noteworthy that the model suggests not only the core engineering roles essential for the task, but also ancillary positions like AI Ethics and Compliance Specialists. The significance of these important ancillary roles may not be readily apparent to hiring managers during the team assembly process for self-driving software development. This is a good example where generative AI can play a valuable role in assisting managers in identifying their hiring needs.

Example 2: Crafting a Job Description for a New Role in the Organization

After considering the priorities of the organization, let's say the manager in the previous example decides to hire a computer vision engineer. ChatGPT can again easily help the manager to draft a job description for this position.

Prompt:



I am a start-up company in Pittsburgh. You are an expert hiring manager in the self-driving car industry. I would like to hire a computer vision engineer to develop self-driving software. Could you write a job description for this job?

Response (not shown in full to conserve space):



Certainly! Here's a job description for a Computer Vision Engineer position at your self-driving car startup in Pittsburgh:



Job Title: Computer Vision Engineer - Self-Driving Car

Location: Pittsburgh, PA

Company Overview:

[Your Company Name] is an innovative startup dedicated to revolutionizing the future of transportation through autonomous vehicle technology. We are committed to developing cutting-edge self-driving software that will make roads safer, reduce congestion, and provide greater mobility to all. Join us in shaping the future of transportation!

Position Overview:

We are seeking a highly motivated and talented Computer Vision Engineer to join our dynamic team of experts in the self-driving car industry. As a Computer Vision Engineer at [Your Company Name], you will play a pivotal role in developing and optimizing the computer vision algorithms that enable our autonomous vehicles to perceive and interpret the world around them.

Responsibilities:

- Design, implement, and optimize computer vision algorithms for object detection, tracking, and recognition.
- Collaborate with multi-disciplinary teams including machine learning, robotics, and sensor fusion engineers to integrate computer vision solutions into our self-driving software stack.
- Work on data collection, annotation, and preprocessing to train and fine-tune computer vision models.

Regenerate

- Perform thorough testing, debugging, and validation of computer vision algorithms in both simulation and real-world environments.
- Continuously research and stay updated on the latest advancements in computer vision and sensor technologies, incorporating them into our software development process.
- Contribute to the development of high-definition maps and localization algorithms.
- Participate in code reviews, knowledge sharing, and mentoring of junior engineers.

Qualifications:

- Bachelor's, Master's, or Ph.D. in Computer Science, Electrical Engineering, or a related field.
- Proven experience in computer vision, with a strong background in object detection, tracking, and image processing.
- Proficiency in programming languages such as Python and C++.
- Familiarity with deep learning frameworks (e.g., TensorFlow, PyTorch) and computer vision libraries (OpenCV).
- Experience with 3D perception, LIDAR, radar, and other sensor data is a plus.
- Strong problem-solving skills and the ability to work in a fast-paced, collaborative environment.
- Excellent communication skills and the ability to articulate complex technical concepts.

Why Join [Your Company Name]:

- Be part of a passionate and diverse team working on cutting-edge technology.
- Contribute to the development of autonomous vehicles that have the potential to transform transportation and improve lives.
- Competitive salary, benefits, and equity options.
- Collaborative and innovative work culture.
- Opportunity for professional growth and development in a rapidly evolving industry.

How to Apply:

 Regenerate

Notably, the model not only generates the content in a readily usable job description format, but also populates the responsibilities and qualifications that are pertinent for a candidate applying for this position. The manager only needs to add/delete necessary content to attract qualified candidates (and to deter unqualified ones).

Next, consider a scenario where this job requires on-site work, and there is a limited pool of computer vision engineers already residing in Pittsburgh. Could the job description be tailored to emphasize the advantages of relocating to Pittsburgh, thereby enticing talent from other geographical areas, such as the Bay Area in San Francisco?

Prompt:



There is a limited pool of computer vision engineers already residing in Pittsburgh. I would like to tailor the job description above to emphasize the advantages of relocating to Pittsburgh, thereby enticing talent from other geographical areas. Especially, I want to hire talent who currently lives in the Bay Area in San Francisco. Could you rewrite the job description for me?



Response (revised portion):



Certainly, here's a tailored job description that emphasizes the advantages of relocating to Pittsburgh and aims to attract talent, including those currently residing in the Bay Area in San Francisco:



Position Overview:

Are you a talented Computer Vision Engineer looking to take your career to the next level? Are you currently based in the Bay Area in San Francisco or elsewhere but open to exciting opportunities? We are actively seeking passionate Computer Vision Engineers to join our dynamic team at [Your Company Name] in Pittsburgh, PA. Relocate to Pittsburgh, and here's why:

Why Relocate to Pittsburgh:

1. **Thriving Tech Ecosystem:** Pittsburgh is home to a rapidly growing tech community, with a focus on robotics and autonomous systems. You'll be part of a vibrant ecosystem of like-minded professionals and organizations dedicated to shaping the future of mobility.
2. **Cost of Living:** Pittsburgh boasts a significantly lower cost of living compared to the Bay Area. Your salary will go further here, allowing you to enjoy a higher quality of life.
3. **Work-Life Balance:** Pittsburgh offers a perfect balance between a thriving tech scene and a relaxed lifestyle. Enjoy shorter commutes, affordable housing, and access to world-class healthcare and education.
4. **Cultural Hub:** Pittsburgh is a city of culture, with world-class museums, theaters, sports, and a diverse culinary scene. It's a great place to live and explore.
5. **Education and Research:** Pittsburgh is renowned for its universities and research institutions, providing opportunities for continued learning and collaboration.

As shown in the new response, it is clear that the model understood the prompt and generated a response that was tailored to the organization's needs. Particularly, the response now includes a section on why a candidate might consider relocating to Pittsburgh, including reasons such as the thriving tech ecosystem, cost of living, and opportunities for education and research.

Next, let's imagine that the company has been emphasizing diversity, equity, and inclusion in its workplace and the manager is concerned that the job description may contain content that would

make certain candidates feel hesitant to apply. Could ChatGPT identify some areas of the job description that could be problematic in this case?

Prompt:



You are an expert hiring manager that values diversity, equity, and inclusion. Could you highlight any content in this job description that could prevent certain types of individuals (e.g., women, LGBTQ, people of color, underrepresented minorities, etc.) from applying to this job?

Response:



As an expert hiring manager who values diversity, equity, and inclusion, I've reviewed the job description for any potential content that could unintentionally discourage individuals from diverse backgrounds from applying to this job. Here are some areas of concern:



1. Location Bias:

- The job description emphasizes relocating to Pittsburgh as a key selling point. While this can be attractive to some candidates, it may discourage individuals who are not willing or able to relocate, particularly if they have family or other commitments that tie them to their current location. Consider rephrasing this section to make it clear that remote or relocation-assistance options might be available.

2. Bay Area Mention:

- The job description mentions individuals currently based in the Bay Area in San Francisco but open to opportunities. This could inadvertently discourage candidates from other geographic regions, making them feel that they are not the target audience for the position. Instead, emphasize that candidates from diverse locations are encouraged to apply.

3. Gender-Neutral Language:

- The use of pronouns and language throughout the description should be reviewed to ensure it's inclusive and gender-neutral. For example, replace phrases like "Are you a talented Computer Vision Engineer" with "Are you a talented individual with experience in Computer Vision Engineering."

4. Assumptions About Lifestyle:

- Statements about work-life balance, cost of living, and lifestyle can inadvertently alienate candidates who may not fit the assumed lifestyle. Avoid making generalizations about what candidates may value in terms of cost of living, commute times, or quality of life.

(response continued on next page)

5. Inclusivity Language:

- While there is a statement about being an equal opportunity employer, consider expanding this section to explicitly mention the company's commitment to diversity, equity, and inclusion. Encourage candidates from all backgrounds to apply and emphasize a commitment to building a diverse team.

6. Cultural Hub Reference:

- The description mentions a "diverse culinary scene," which may unintentionally stereotype or prioritize certain cultural experiences over others. It's important to avoid cultural bias in such references.

7. Unconscious Bias:

- Ensure that the entire job description is reviewed for any unconscious bias, assumptions, or stereotypes that may discourage underrepresented candidates from applying.

8. Diverse Imagery:

- If possible, consider using images in the job posting that showcase diversity within the company to further emphasize inclusivity.

In summary, while the job description is well-written, it's essential to review and revise it to ensure it does not inadvertently exclude or discourage individuals from diverse backgrounds from applying. Promoting inclusivity in both language and content can help attract a more diverse pool of candidates.

Again, the model fully understood the prompt. Importantly, the model may not be capable of identifying *all* the biased elements within the job description, but it still offers valuable pointers. For instance, the response highlights that the original job description contained contents that could only appeal to a specific demographic, such as those who favor particular lifestyles or cultural experiences. By becoming aware of these subtle nuances in job descriptions, hiring managers can craft job descriptions that are more inclusive.

Example 3: Summarizing Contents of Lengthy Applications and Highlighting Strengths and Weaknesses of an Applicant

Another very useful application of ChatGPT is summarizing contents of lengthy applications and highlighting strengths and weaknesses of a candidate within seconds. For this example, I first created a fictitious cover letter of a job candidate who is applying to a computer vision engineer position (you can read the letter [here](#)). Next, I use ChatGPT to summarize the cover letter, highlighting the candidate's strengths and weaknesses.

Prompt:



I am a hiring manager who is screening cover letters of job candidates. Would you be able to summarize the following candidate's cover letter, highlighting the candidate's strengths and weakness as a computer vision engineer?

Response:



Summary of Strengths and Weaknesses as a Computer Vision Engineer Candidate:



Strengths:

1. **Strong Educational Background:** The candidate holds a Master's degree in Computer Vision from Carnegie Mellon University, demonstrating a solid theoretical foundation in computer vision.
2. **Research and Project Experience:** Their involvement in challenging computer vision projects during their academic journey, particularly the "Real-time Object Detection using Deep Learning" project, showcases their practical skills and ability to solve complex vision problems.
3. **Professional Experience:** The candidate has practical experience as a Computer Vision Intern at Tesla and as a Computer Vision Engineer at Apple, contributing to real-world applications of computer vision technology.
4. **Technical Proficiency:** Proficiency in programming languages like Python, C++, and Java, as well as deep learning frameworks such as TensorFlow and PyTorch, demonstrates their technical expertise. Their familiarity with computer vision libraries and cloud computing platforms adds to their technical capabilities.
5. **Effective Communication:** The candidate highlights their ability to communicate complex technical concepts clearly, an essential skill for collaboration and stakeholder engagement.
6. **Passion for Computer Vision:** The candidate expresses a deep passion for computer vision, which suggests a strong motivation to stay updated with the latest advancements and a genuine enthusiasm for the field.

Weaknesses:

1. **Lack of Quantifiable Achievements:** While the candidate mentions their contributions to projects at Tesla and Apple, they could enhance their cover letter by including specific, quantifiable results or achievements from these experiences. This would make their more tangible to potential employers.
2. **Limited Mention of Soft Skills:** While they briefly mention collaboration and communication skills, the cover letter could benefit from more explicit examples of how these skills were applied in their professional roles.
3. **Generic Conclusion:** The closing paragraph, while expressing enthusiasm, is somewhat generic and could be more tailored to the specific company or role they are applying for.

Regenerate

The model effectively summarizes the cover letter, highlighting the candidate's strengths and weaknesses. Notably, this summary can be further condensed.

Prompt:



Could you further condense the contents of this summary?

Response:



Certainly, here's a condensed summary of the candidate's strengths and weaknesses as a Computer Vision Engineer:



Strengths:

1. Strong academic background, including a Master's degree in Computer Vision.
2. Impressive research experience, especially in real-time object detection.
3. Practical work experience at Tesla and Apple in computer vision.
4. Proficiency in key programming languages and deep learning frameworks.
5. Effective communication skills and a passion for computer vision.

Weaknesses:

1. Lack of quantifiable achievements in their professional roles.
2. Limited elaboration on soft skills such as collaboration and communication.
3. Generic conclusion in their cover letter.

Regenerate

As demonstrated, the model effectively preserved key information in the condensed summary. Like this, the utilization of generative AI in the hiring process can be especially valuable when managers are tasked with reviewing a large number of applications or when they need to present concise candidate summaries to the top management team for further evaluation.

Example 4: Generating Relevant Interview Questions

Now let's suppose that the manager has made a shortlist of candidates and would like to interview them. What questions could be asked? ChatGPT is also capable of generating interview questions and problem-solving tasks relevant to the job position.

Prompt:



I am a manager at a self-driving software company. My company is trying to hiring a computer vision engineer to develop self-driving software. You are an HR expert. What are 10 interview questions I can ask candidates to better assess their skills and knowledge for developing self-driving software?

Response:



Hiring a computer vision engineer for self-driving software development is a critical task. To help you assess candidates effectively, here are ten interview questions that can help you evaluate their skills and knowledge:



1. Explain the fundamental concepts of computer vision and how they relate to self-driving software.

This question assesses the candidate's foundational knowledge in computer vision and their ability to connect it with the specific requirements of self-driving technology.

2. Describe a challenging computer vision problem you've worked on in the past. How did you approach it, and what was the outcome?

This question allows the candidate to showcase their practical experience and problem-solving skills in the field of computer vision.

3. How do you handle real-time processing and optimization challenges in computer vision algorithms for self-driving cars?

Self-driving cars require real-time decision-making based on visual data. This question assesses the candidate's ability to optimize algorithms for time-critical applications.

4. Can you explain the role of LiDAR, RADAR, and cameras in a self-driving car's sensor suite? How do these sensors complement each other?

Assess the candidate's understanding of sensor fusion and their ability to work with different types of sensor data.

5. What machine learning techniques have you used in computer vision projects, and how have they improved the performance of your algorithms?

Evaluate the candidate's proficiency in machine learning and its application to computer vision.

6. Describe a situation where your computer vision algorithm failed or produced unexpected results. How did you diagnose and resolve the issue?

This question assesses the candidate's troubleshooting skills and their ability to handle setbacks.

7. Explain the importance of data quality and annotation in training self-driving software. How do you ensure the accuracy and reliability of training data?

This question evaluates the candidate's knowledge of data preparation and the challenges specific to self-driving software.

8. Can you discuss any experience you have with deep learning architectures for computer vision, such as CNNs (Convolutional Neural Networks) or RNNs (Recurrent Neural Networks)?

Explore the candidate's familiarity with advanced techniques and their ability to apply them effectively.

9. What safety measures and redundancies are crucial in self-driving software to ensure passenger and pedestrian safety?

Evaluate the candidate's awareness of safety considerations in autonomous vehicles, including fail-safes and fallback mechanisms.

10. **How do you stay updated with the latest advancements in computer vision and self-driving technology? Can you provide an example of how you've applied cutting-edge research to a project?**

Assess the candidate's commitment to continuous learning and their ability to integrate the latest developments into their work.

Remember to combine these technical questions with behavioral and situational questions to gauge the candidate's teamwork, communication skills, and adaptability, as these soft skills are also essential for success in a collaborative engineering environment.

Notably, the model generates very specific interview questions that are tailored to the job position and provides reasoning for why each question should be asked. In addition, at the end of the response, it even recommends the managers to ask behavioral and situational questions to assess the candidate's soft skills. Using these questions as a starting point, the manager could easily further customize the interview questions so that they suit the organization's needs.

As an extension, ChatGPT can also generate problem-solving tasks that can be used to test the candidate's actual proficiency in a technical area.

Prompt:



I am a manager at a self-driving software company. My company is trying to hiring a computer vision engineer to develop self-driving software. Could you suggest 1 coding task that could test a candidate's ability to develop self-driving software?

Response:



Certainly! When assessing a candidate's ability to develop self-driving software, you can provide them with a coding task that involves simulating a simple self-driving scenario using computer vision techniques. Here's a coding task that can help evaluate their skills:



Task: Lane Detection and Vehicle Tracking

Description:

Ask the candidate to develop a Python program that can process a video stream or a sequence of images from a vehicle's perspective (e.g., a dashboard camera) and perform the following tasks:

1. **Lane Detection:** Implement lane detection to identify and mark the lanes on the road. The candidate should be able to detect both the left and right lanes, even in challenging conditions such as varying lighting, shadows, and road curvature.
2. **Vehicle Tracking:** Implement vehicle tracking to identify and track other vehicles on the road. The candidate should be able to detect and track multiple vehicles in real-time, even when they change lanes or move in and out of the camera's view.

3. **Visualization:** Visualize the detected lanes and tracked vehicles by overlaying the information on the input video frames. This visualization can help demonstrate the accuracy of the detection and tracking.

Evaluation Criteria:

Evaluate the candidate based on the following criteria:

1. **Accuracy:** Check the accuracy of lane detection and vehicle tracking. The lanes should be accurately detected, and vehicles should be consistently tracked.
2. **Robustness:** Assess the robustness of the algorithm under different lighting conditions, road types, and traffic scenarios. The code should handle challenging situations gracefully.
3. **Real-time Performance:** Evaluate whether the code can process the video stream in real-time or near real-time, as real-time performance is critical for self-driving applications.
4. **Code Quality:** Review the candidate's code for clarity, organization, and comments/documentation to ensure it's easy to understand and maintain.
5. **Problem-Solving:** Consider how the candidate approaches and solves any challenges that arise during the task.
6. **Optimization:** Assess whether the candidate has optimized the code for performance without sacrificing accuracy.

This task will test the candidate's ability to work with computer vision techniques, handle real-world data, and implement core components of self-driving software, which are essential skills for a computer vision engineer in the self-driving industry.

As shown, the model can even easily generate a relevant problem-solving task, along with important criteria to evaluate the solution. The best part is that the model can regenerate various versions of this task according to different requirements, in a matter of seconds.

Risks and Limitations of Using Generative AI in the Recruitment Process

In the previous section, some useful applications of generative AI to the recruitment process were introduced. Clearly, there is large potential for managers to save time and effort in the process by utilizing generative AI tools such as ChatGPT. This is not to say, however, that managers should solely rely on these models. Below, I describe three major risks and limitations of these models, along with action plans for managers to mitigate these risks and limitations.

1. *Is the output based on information that is up to date?*

- One of the risks of using generate AI models is that the training data may not be up to date. For example, when ChatGPT was released in November 2022, the training data only included information collected up to 2021. Therefore, any information that become available after 2021 would not have been included in the outputs shown to managers at the inception of the model. This can pose a challenge, especially in

scenarios where a manager intends to include contents such as salary information, as the suggested number may not accurately reflect current market trends. Therefore, it is the manager's role to check the latest coverage of the training set and keep up with information that became available since the last update, which would have to be manually added.

2. *Is the output complete/accurate?*

- In certain instances, generative AI models produce outputs that are nonsensical or false. This phenomenon is called *AI hallucination* and tends to happen when the training data on a certain topic is insufficient or of low quality. This limitation could be problematic when the model is generating job descriptions or interview questions for jobs that are fairly new or rare. Therefore, it is ultimately the manager's role to review the output that has been produced and verify its accuracy. Furthermore, if the manager does not have expertise in the output that is being generated (e.g., the problem-solving task for testing technical skills), they should seek external advice from (human) experts in those domains.

3. *Is the output potentially biased?*

- As demonstrated in the earlier example of the job description generated by ChatGPT, there is a possibility that a generative AI model might produce biased outputs. One approach to mitigate this risk is to prompt the model to 'self-reflect' in a specific dimension, as I did with the model when addressing concerns related to diversity, equity, and inclusion in the job description. However, it would also be crucial to formulate a team of diverse human individuals review biases in AI-generated outputs, especially when those biases could lead to negative consequences for the organization (such as the reduction in workforce diversity). Fortunately, ChatGPT appears to have its own policies against generating HR content that blatantly discriminates against people based on certain demographics (which is indeed illegal in the U.S. under laws enforced by the Equal Employment Opportunity Commission)³. For example, when prompted to write a job description that 'discourages' certain demographics from applying to a job, the model will respond with: "*I'm sorry, but I cannot assist in creating a job description that includes discriminatory language or excludes individuals based on any protected characteristic. It's essential to adhere to principles of equal opportunity and avoid discrimination in the hiring process.*" Nevertheless, managers should exercise caution when using HR contents generated by generative AI models.

Conclusion

In this article, I have introduced various applications of generative AI within the context of recruitment, shedding light on the technology's potential to help organizations find the right employees. There is no doubt that generative AI is a powerful tool for aiding managers in talent acquisition. However, it is crucial to underscore that the human element remains indispensable in making informed, nuanced hiring decisions that ultimately align with an organization's values and

³ <https://www.eeoc.gov/prohibited-employment-policiespractices>

goals. As organizations continue to evolve in an increasingly competitive landscape, harnessing the power of generative AI alongside human insight and values can pave the way for more informed, inclusive, and successful recruitment practices. By striking a harmonious balance between the capabilities of AI and the expertise of human decision-makers, organizations can truly unlock their potential in building strong, diverse, and high-performing workforces for the future.