# PROMPT ENGINEERING REPORT

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## **INTRODUCTION**

Prompt engineering involves crafting and refining queries to elicit specific responses from machine learning models. Its significance lies in:

- Optimizing Model Outputs: Achieving the most relevant and accurate answers from the model.
- **Customizing Behavior**: Adjusting outputs without retraining the model.
- **Bias Mitigation**: Guiding the model towards more neutral answers.
- **User Experience**: Ensuring smoother interactions in applications like chatbots.

In essence, prompt engineering refines model interactions to meet user needs and improve results.

# **OBJECTIVE OF PROMPT ENGINEERING**

With respect to the given project, Prompt engineering was pivotal in our analysis of the candidate:

- Extracting Insights: The prompts allowed for detailed extraction from candidates's transcript, highlighting specific educational and personal details.
- **Evaluating Soft Skills**: Precise prompts led to the identification of key soft skills, giving depth to the candidate's evaluation.
- **Identifying Expertise**: The model pinpointed Jeffrey's specializations based on the directed prompt, which would have been glossed over otherwise.
- **Streamlined Decision**: With structured prompts, a reasoned recruitment decision was made efficiently, avoiding a lengthy, iterative process.

In short, prompt engineering ensured an effective and efficient evaluation, capturing critical facets of a candidate's profile.

### **PROMPTS USED:**

### **FIRST PROMPT:**

**Initial Prompt**: Assume the role of a Hiring Manager hiring in a company called I'mbesideyou which is a company specializing in AI analytics for online conversation and which also focuses on Overall Mental Well Being of people by bringing solutions through cutting edge technology of AI and Machine Learning.

**Final Prompt**: Assume the role of a Hiring Manager hiring for a role of Data Scientist Intern in a company called I'mbesideyou which is a company specializing in AI analytics for online conversation and which also focuses on Overall Mental Well Being of people by bringing solutions through cutting edge technology of AI and Machine Learning. Give a concise answer.

**Modifications**: In the earlier prompt, the role for which the hiring manager is hiring was not specified so vague answers were observed. Also the first response was very lengthy and repetitive, and hence after necessary modifications accurate and concise responses were received.

**Rationale**: The prompt tells us we're looking for a "Data Scientist Intern" and asks chatGPT to think like a "Hiring Manager." By mentioning the company's work and mission, it gives a good picture of what's important for the job. This setup helps in getting answers that fit the company's needs and values, making the whole chat more on-point.

### **SECOND PROMPT:**

**Initial Prompt**: Here is the transcript: 'Transcript Text'; Now react on the prompt that I will give you.

**Rationale**: This prompt takes the Transcript Text as input.

### THIRD PROMPT:

**Initial Prompt**: Based on the introduction video transcript, extract key details from the candidate's self-introduction, including their name, age, hometown, educational background, and any initial personal interests or hobbies they mentioned.

**Final Prompt**: Based on the introduction video transcript, extract key details from the candidate's self-introduction, including their name, age, hometown, educational background, and any initial personal interests or hobbies they mentioned. Be concise with the output

**Modifications**: The only change that was made was asking ChatGPT to produce a more concise response.

**Rationale**: This prompt is useful because it directs the extraction of specific, relevant information from the provided data (transcript). By clearly listing what details are sought (name, age, hometown, etc.), it ensures a focused and organized response, making it easier to quickly understand and assess the candidate's background and interests.

### **FOURTH PROMPT:**

**Initial Prompt**: Analyze the transcript of the introduction video and evaluate the candidate's skills. Highlight any instances that showcase strengths or areas for improvement.Be concise

**Final Prompt**: Analyze the transcript of the introduction video and evaluate the candidate's soft skills. Highlight any instances that showcase strengths or areas for improvement. Be concise

**Modifications**: The prompt was made to evaluate only the soft skills in the final prompt whereas in the initial prompt it evaluates both the technical and soft skills, thus mixing the both.

**Rationale**: This prompt is useful because it narrows down the analysis to a specific aspect: the candidate's soft skills. By emphasizing conciseness and highlighting strengths or areas for improvement, it ensures a clear, brief evaluation, making it straightforward for decision-makers to grasp the candidate's interpersonal competencies quickly.

### FIFTH PROMPT:

**Final Prompt**: Based on the introduction video transcript, identify the candidate's areas of expertise or specialization. List any specific technical skills, experiences, or knowledge areas mentioned. Be concise.

**Modifications**: No necessary modifications were made to the initial prompt.

**Rationale**: TThe prompt is useful as it pinpoints the candidate's technical strengths and expertise. By emphasizing areas of specialization and specific skills, it provides a clear snapshot of the candidate's professional capabilities. The call for conciseness ensures that the response is direct, making it easier for reviewers to quickly gauge the candidate's fit for the role.

### **SIXTH PROMPT:**

**Initial Prompt**: Review the introduction video transcript and provide any additional insights or observations. Be concise

**Final Prompt**: Review the introduction video transcript and provide any additional insights or observations that might be relevant for making a recruitment decision about the candidate. Be concise

**Modifications**: The prompt was made to focus more on the insights that were important to the hiring process of the candidate for the role of Data Scientist, whereas earlier it gave answers that were not entirely relevant.

**Rationale**: This prompt is beneficial because it pushes for a comprehensive evaluation of the transcript beyond mere surface details. By soliciting additional insights and observations, it promotes a more nuanced understanding of the candidate, capturing potential strengths or concerns that might influence a hiring decision. The request for conciseness ensures the response remains focused and accessible, making it efficient for decision-makers to absorb the critical takeaways about the candidate's suitability.

### **SEVENTH PROMPT:**

**Final Prompt**: Identify any personal values, motivations, or aspirations the candidate mentioned in the transcript. How might these align with our company's values and mission? Be concise.

**Modifications**: No necessary changes were made to the initial prompt.

**Rationale**: This prompt is valuable because it seeks alignment between the candidate's personal values and the company's mission. By identifying the candidate's motivations and aspirations, it facilitates a deeper understanding of their fit within the company

culture. The call for conciseness ensures a direct assessment, aiding quick yet informed hiring decisions.

### **EIGHTH PROMPT:**

**Initial Prompt**: Finally Summarize the result from all of the above prompts in not more than 100 words about candidate's suitability for the internship opportunity.

**Final Prompt**: Finally Summarize the result from all of the above prompts in not more than 100 words about candidate's suitability for the internship opportunity including an explicit Yes or no as to whether the person is suitable for the job or not and please provide reasons from the data.

**Modifications**: The prompt was changed to return an explicit Yes or No in answer and also to provide reasons extracted from the transcript which might act as feedback for the candidate.

**Rationale**: This prompt is instrumental because it synthesizes the entire evaluation process into a concise summary, ensuring that all the previous analyses converge into a definitive assessment. By asking for a clear verdict (Yes or No) and data-backed reasons, it ensures objectivity in the evaluation. Such a streamlined summary not only aids decision-makers in grasping the candidate's suitability quickly but also ensures that the conclusion is drawn from a comprehensive, data-driven perspective, minimizing biases and facilitating an informed recruitment decision.