

Interview Script

2. Professional Background and Experience with NLP in Requirements Engineering

2.1. Role and Interaction with NLP Tools

- Could you describe your role in the software development process, particularly focusing on how you interact with NLP tools for requirements analysis?
- How do NLP tools facilitate your work in translating requirements into design elements, such as domain models?

2.2. Experience with NLP-Driven Design Extraction

- Reflecting on your experiences, how has the introduction of NLP tools changed the way you approach requirements engineering and design extraction?
- Can you share an instance where an NLP tool significantly impacted the design extraction process, either positively or by presenting challenges?

3. Encounters with non-interpretable/explainable NLP Outputs

3.1. Frequency and Impact on Design Decisions

- How often do you encounter situations where NLP tool outputs are non-interpretable/explainable, and how does this affect your design decisions?
- Describe a scenario where non-interpretable/explainable outputs from an NLP tool influenced the design extraction process or led to revisions in the initial design.

3.2. Strategies for Handling Non-Interpretable/explainable Outputs

- When faced with non-interpretable/explainable outputs from NLP tools, what strategies or approaches do you use to interpret/explain or validate these outputs for design purposes?

4. Challenges Stemming from Non-Interpretable/explainable NLP Outputs

4.1. Specific Instances and Impact on Projects

- Can you recall a specific project where non-interpretable/explainable NLP outputs presented a significant challenge in requirements engineering or design extraction? How was this addressed?
- Have there been instances where the lack of clarity in NLP outputs led to misunderstandings or delays in the project timeline?

4.2. Common Challenges and Risks in Design Extraction

- What are some common challenges you face when working with non-interpretable/explainable NLP outputs in the context of design extraction from requirements?
- From your perspective, what are the key risks associated with relying on non-/explainable table NLP tools for critical design decisions?

5. Enhancing Interpretability/explainability and Usability in NLP Tools for RE

- Discuss strategies or methodologies you've encountered or would recommend to improve the interpretability/explainability and usability of NLP outputs in the design extraction process.
- Are there specific practices within your team or organization aimed at ensuring the clarity and actionability of NLP tool outputs for effective design extraction?

6. Impact of non-interpretable/explainable Outputs on RE Processes

6.1. Influence on Requirements Validation and Design Formulation

- How do non-interpretable/explainable outputs from NLP tools impact the requirements validation phase and subsequent design formulation?
- Can you describe a situation where interpretability/explainability issues with NLP tool outputs complicated the validation of requirements or the formulation of initial designs?

6.2. Communication with Stakeholders about NLP-Driven Designs

- How do you approach discussions with stakeholders when presenting designs derived from non-interpretable/explainable NLP tool outputs?
- What methods or tools have you found effective in bridging the understanding gap between technical teams and stakeholders regarding NLP-derived designs?

6.3. Team Dynamics and Collaboration in NLP-Driven Projects

- How does the use of NLP tools, particularly when dealing with non-interpretable/explainable outputs, affect collaboration within the development team, especially between requirements engineers and designers?
- Share an example where interpretability/explainability issues with NLP tools led to significant discussions or re-evaluations in your team's approach to extracting designs from requirements.

7. Desired Features and Improvements in NLP Tools for RE

7.1. Ideal Features for Interpretability/explainability in Design Extraction

- Imagining an ideal NLP tool for requirements analysis and design extraction, what interpretability/explainability features would be crucial for your work?

- What are the 'must-have' interpretability/explainability and usability features for NLP tools in requirements engineering to facilitate clear and effective design extraction?

7.2. Recommendations for Tool Developers

- Based on your experiences, what advice would you give to developers of NLP tools to enhance their interpretability/explainability, especially for extracting designs from requirements?
- Are there specific functionalities within NLP tools for requirements engineering where you believe interpretability/explainability needs greater emphasis or innovation?

7.3. Resources for Understanding and Leveraging NLP in RE

- What kind of support, training, or resources do you think would be most beneficial for requirements engineers and designers to better understand and work with NLP tools, especially regarding interpretability/explainability?
- How do you stay updated with advancements in NLP tools for requirements engineering, and what resources would you recommend to peers in the field?

8. Concluding Insights

8.1. Additional Thoughts and Unexplored Areas

- Is there anything else you'd like to share about your experiences with using NLP tools for requirements analysis and design extraction that we haven't discussed?
- Reflecting on our conversation, are there specific areas within NLP tool application in requirements engineering and design extraction that you think warrant further exploration or research?

8.2. Feedback on Interview and Future Directions

- Do you have any feedback on this interview process, or suggestions on how we could better understand and address the challenges related to interpretability/explainability in NLP tools for requirements engineering and design extraction?