



# AI-Powered Interviewing System

SESSION 2021-25

## Abstract

We present an AI-powered interviewing system for academic-based interviews in computer science domain. It automates candidate shortlisting by conducting automated interviews, evaluating answer quality, and analyzing facial expressions for confidence and emotions. Final scores help recruiters select top candidates. The system saves time, reduces costs, and improves efficiency through advanced natural language and dialogue management.

## System Flow



## Objectives

- To minimize interview time and labor.
- To automate interviews with human-like interaction.
- To generate adaptive, dynamic questions based on responses.
- To enhance natural language understanding and reduce ambiguities.

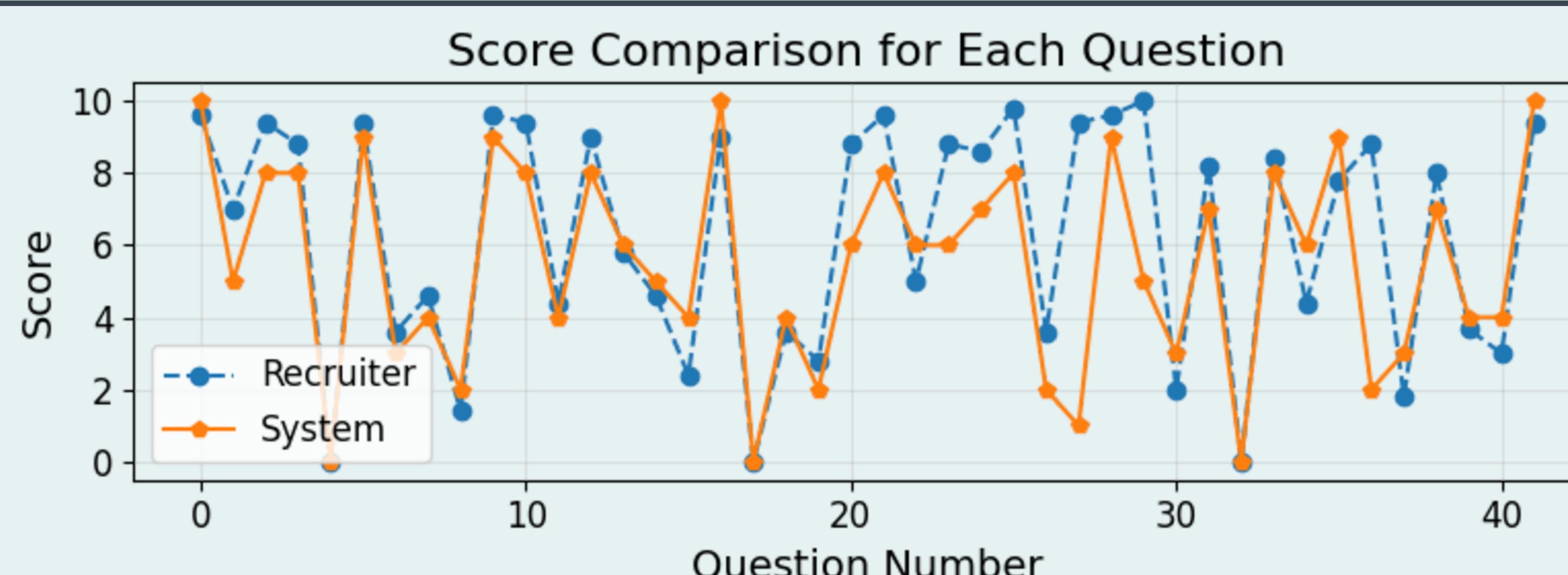
## Key Features



## Results

  
**81% Accuracy**  
Correctly predicts candidate confidence levels with 81% accuracy

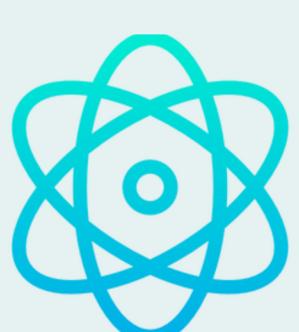
  
**MAE=1.38**  
Up to 13% difference between system and recruiter scores (0.79 correlation)



## Tools and Technologies



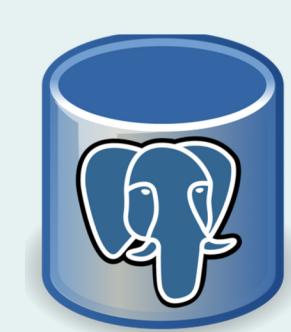
Django



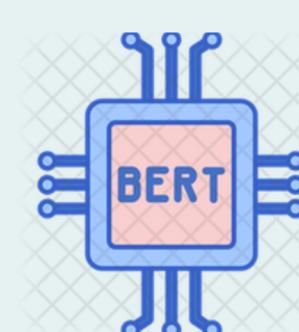
React JS



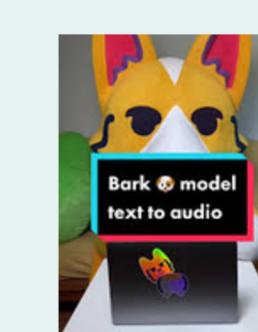
Meta Llama



PostgreSQL



BERT



Suno Bark TTS



Groq

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