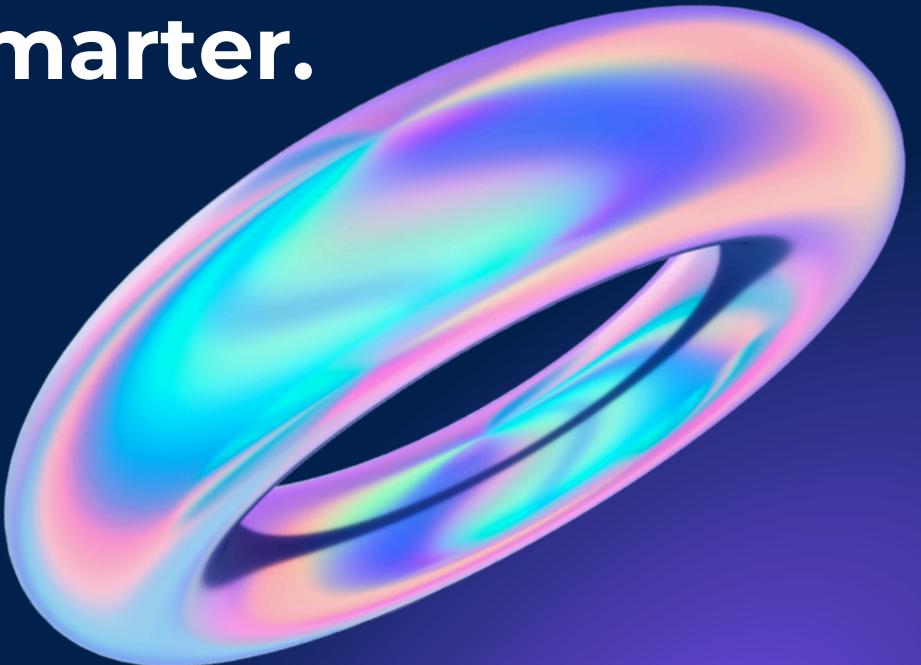




InterAlyze

Analyze Behavior. Evaluate Potential. Hire Smarter.



Team



**Öykü Elis
Türegün**



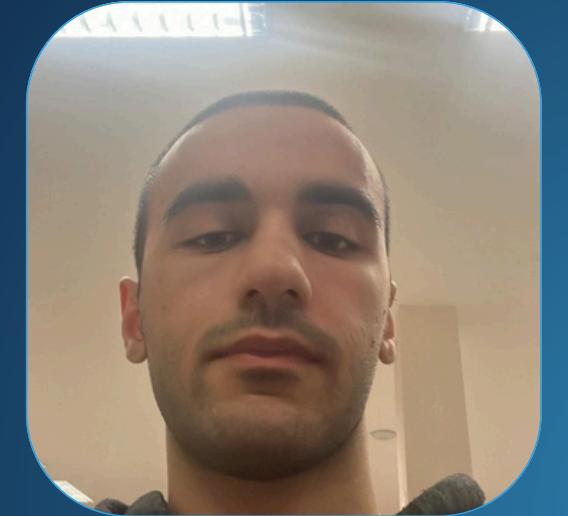
**Kemal Sarper
Şahin**



**Tolga Artun
Koçak**



**Atilla Alp
Yavuz**



**Tolga Han
Arslan**

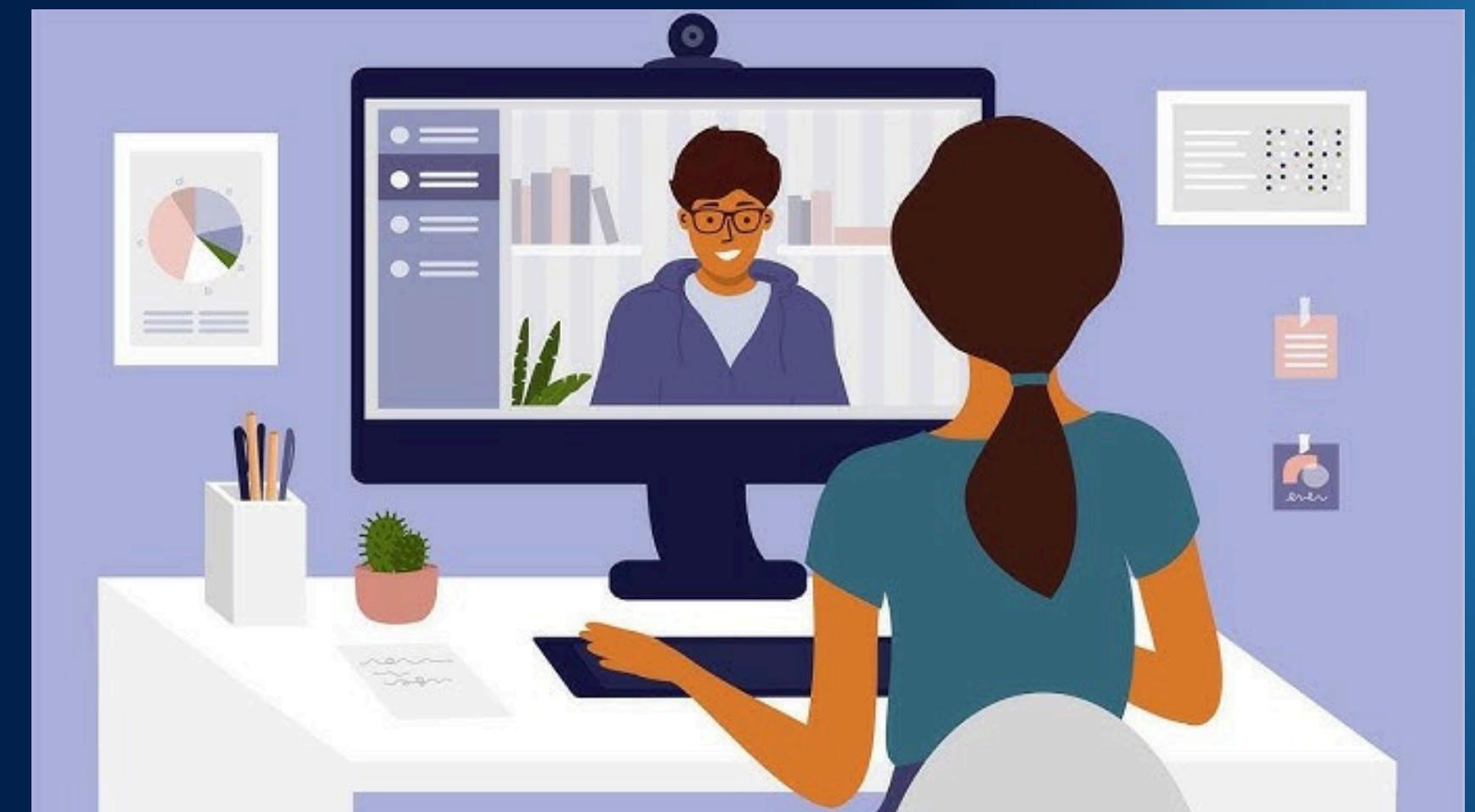
Advisor : Hamdi Dibeklioğlu

Today's Schedule

1. RECRUITMENT CHALLENGE
2. MARKET GAP
3. PROPOSED SYSTEM
4. SYSTEM ARCHITECTURE
5. TECHNOLOGY STACK
6. MODELS
7. ROADMAP
8. WHAT WE ACHIEVED?
9. DEVELOPMENT TEAMS
10. FUTURE GOALS
11. DEMO PLAN

The Recruitment Challenge

- **Online interviews**
- **Subjectivity, bias, and lack of insights in HR interviews.**
- **Limiting non-verbal cues and increasing evaluation difficulties.**
- **Managing large applicant pools efficiently**



Market Gap



**Existing tools focus on live monitoring
or pre-interview assessments**

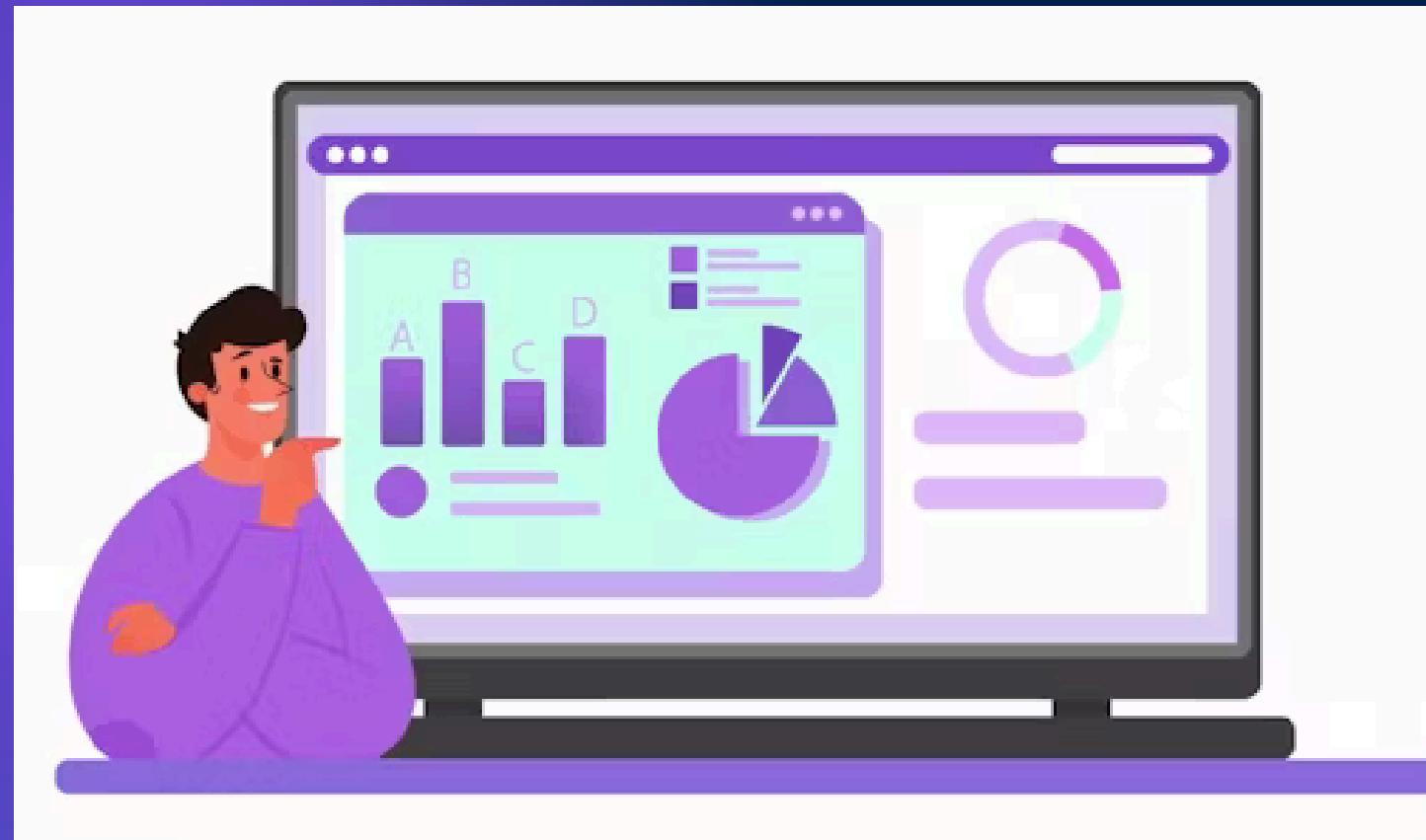
***No emphasis on post-interview
analytics for deeper insights***

No multi-modal evaluation

- ATLAS.ti. (2023). Qualitative Data Analysis Software. Retrieved from <https://atlasti.com/>
- BrightHire. (2023). Interview Intelligence Software. Retrieved from <https://brighthire.com/>
- myInterview. (2023). AI Video Interview Platform. Retrieved from <https://www.myinterview.com/>

Proposed System

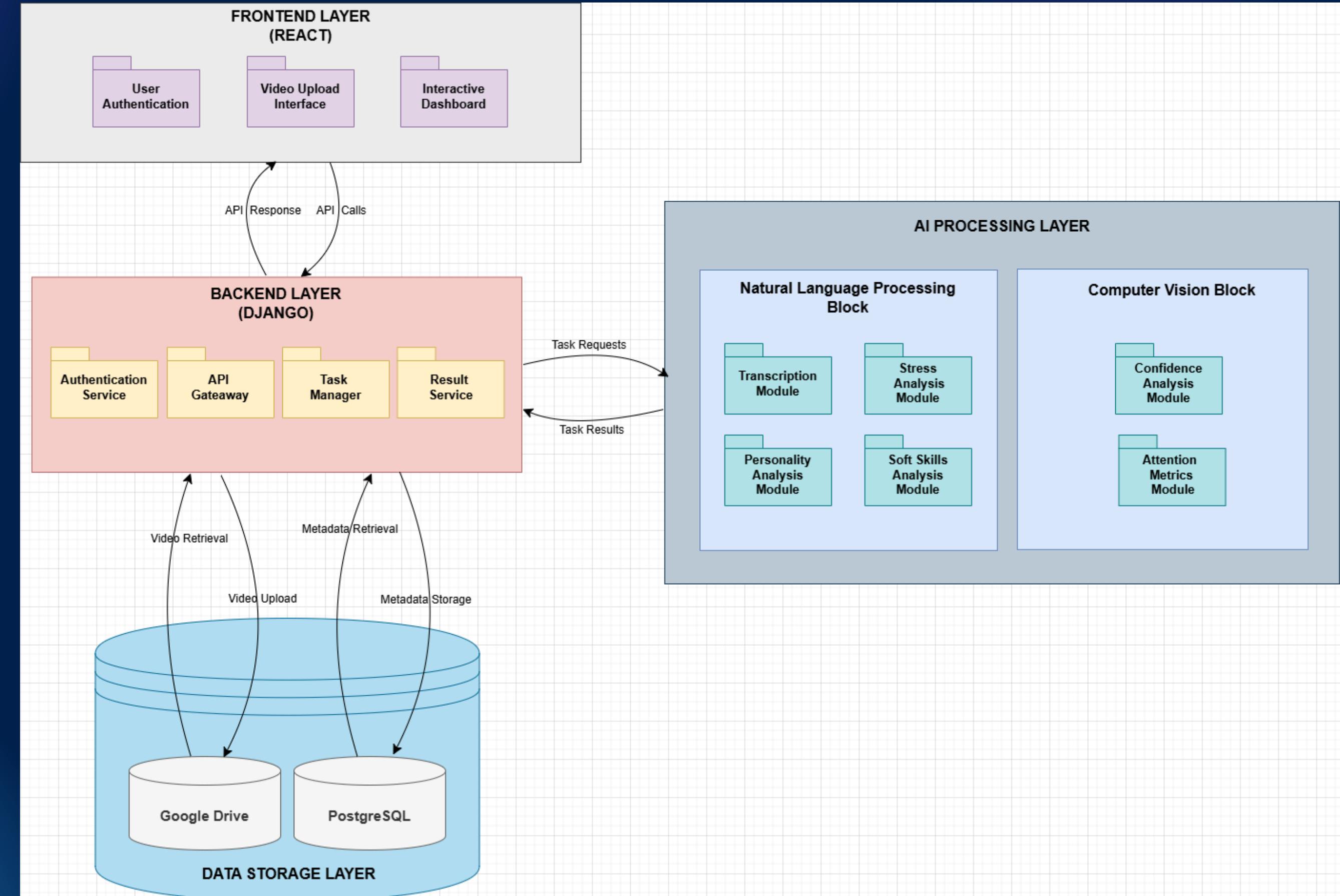
InterAlyze : AI-driven HR Interview Analysis Tool



- ★ **AI-Driven Analytics – NLP + Computer Vision**
- ★ **Flexible Reviews – Post-interview analysis**
- ★ **Interactive Dashboards – Easy data visualization**
- ★ **Bias Reduction – Objective and fair evaluation**
- ★ **Ethical AI – Transparent and accountable**

InterAlyze

SYSTEM ARCHITECTURE



Technology Stack

BACKEND DEVELOPMENT



ML DEVELOPMENT

WHISPERX



FRONTEND DEVELOPMENT

NEXT.js



DATA STORAGE



Models

Personality_LM

- Accuracy : 80%
- F1 Score: 79%
- MSE: 0.07
- MAE: 0.14.

roberta-base_stress_classification

- Loss: 0.1800
- Accuracy: 0.9647
- F1: 0.9647
- Precision: 0.9647
- Recall: 0.9647

SkillNER

- Built on spaCy with a customizable skill database.
- Ideal for resume parsing and HR systems.

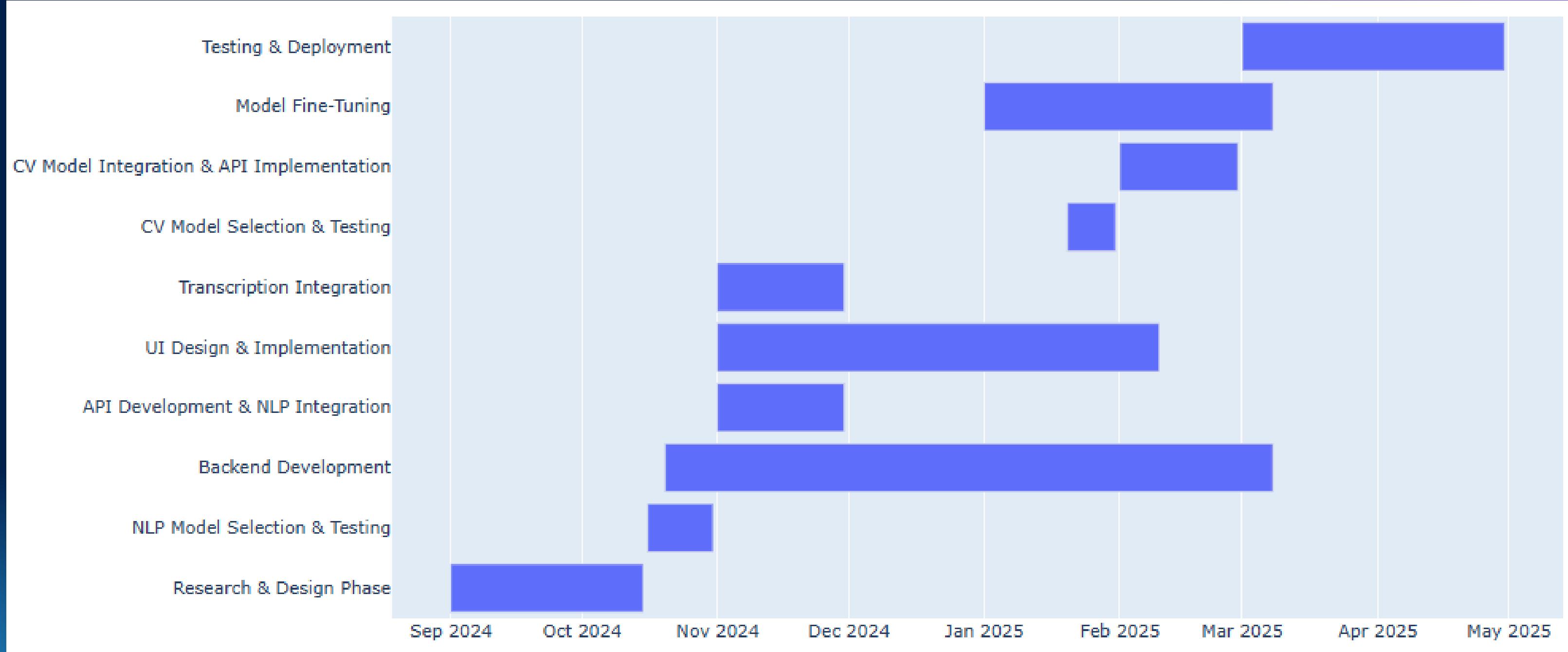
WhisperX

- Fast and accurate speech-to-text transcription.
- Speaker diarization
- Word-level alignment.

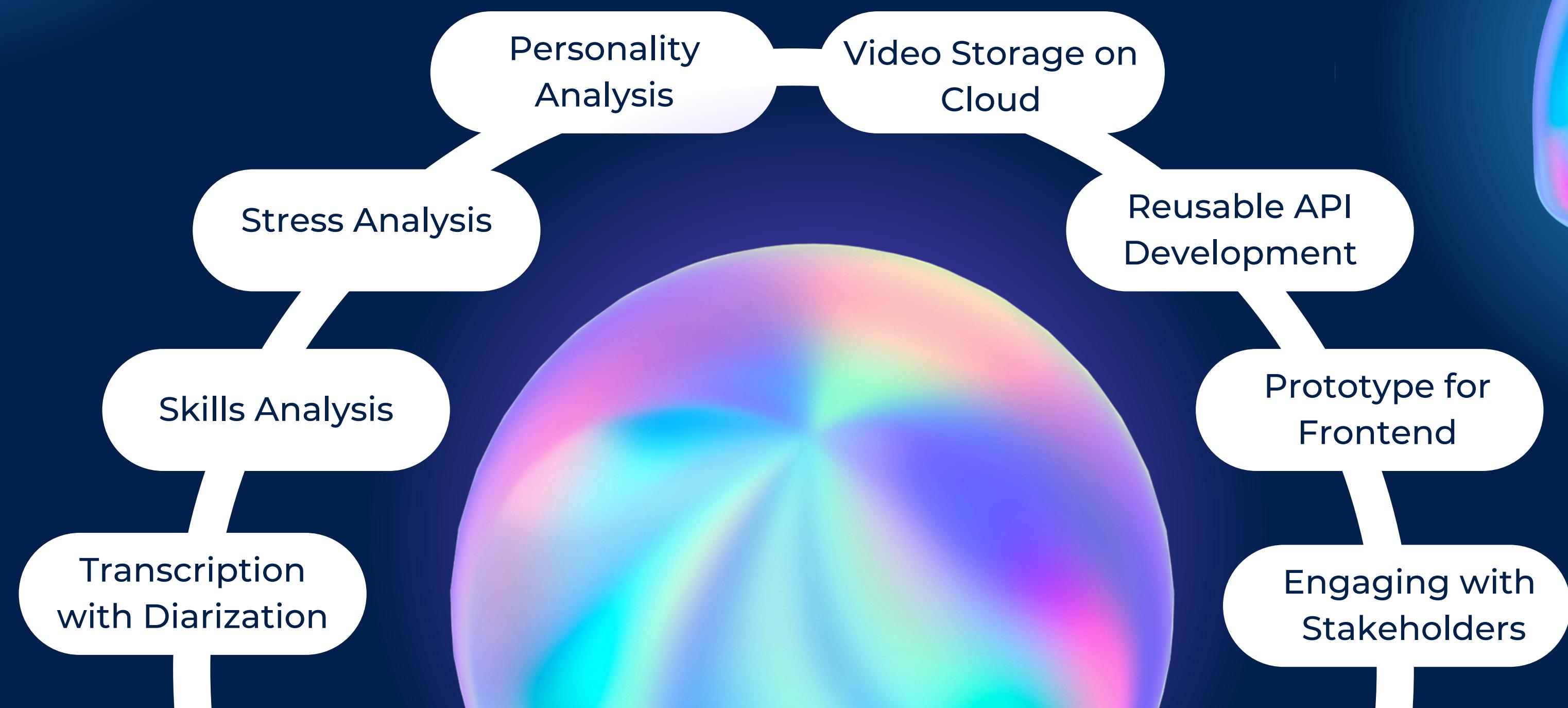
- MIT Interview Dataset is retrieved from University of Rochester by applying through a form

- dstefa. (2023). roberta-base_stress_classification [Model]. HuggingFace. Retrieved from https://huggingface.co/dstefa/roberta-base_stress_classification
- KevSun. (2023). Personality_LM [Model]. HuggingFace. Retrieved from https://huggingface.co/KevSun/Personality_LM
- Aito, A. (2023). SkillNER [Software]. GitHub. Retrieved from <https://github.com/AnasAito/SkillNER>
- Bain, M. (2023). WhisperX [Software]. GitHub. Retrieved from <https://github.com/m-bain/whisperX>

Roadmap



What We Achieved?



Development Teams

ML Team



Öykü Elis Türegün



Tolga Han Arslan

Frontend Team



Tolga Artun Koçak



Atilla Alp Yavuz

Backend Team



Kemal Sarper Şahin



Tolga Han Arslan

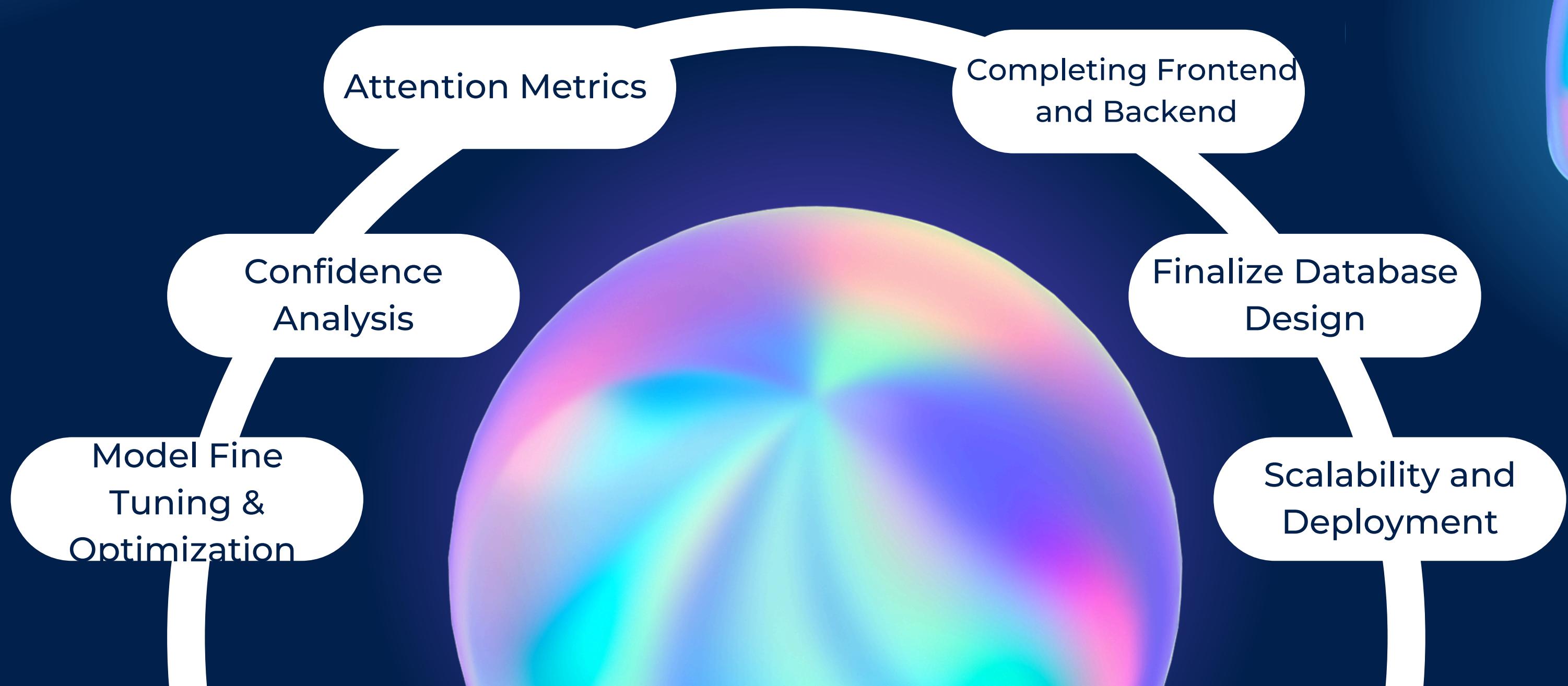


Öykü Elis
Türegün



Atilla Alp
Yavuz

Future Goals



Demo Plan

Create Candidate Page

- Video Upload
- Transcription

Dashboard Page

- Personality Analysis
- Stress Analysis
- Skills Analysis



Thank You

interalyze@gmail.com