

# **An AI-Assisted Framework for European University Interview Preparation**

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## **Abstract**

European university admission interviews are increasingly used to assess applicants' academic preparedness, research alignment, motivation clarity, and communication style beyond traditional quantitative metrics. However, many candidates, particularly international applicants, face significant challenges due to limited access to structured interview preparation tools aligned with European academic norms. This paper presents **EuroUni Interview Prep AI**, a comprehensive AI-based framework for evaluating and improving candidate readiness for European university admission interviews at the Bachelor's, Master's, and PhD levels. The proposed system integrates multiple evaluation dimensions, including academic depth, program understanding, faculty alignment, motivation coherence, communication structure, and cultural appropriateness within a unified interview intelligence engine.

The platform simulates realistic European faculty-led interviews by dynamically generating follow-up questions, assessing consistency between statements of purpose and interview responses, and modeling admissions committee decision-making processes. It further incorporates specialized modules for faculty research alignment analysis, cultural communication coaching, and ethical and policy reasoning evaluation for AI- and data-oriented programs. Structured, rubric-based scoring is used to quantify interview readiness while providing transparent, formative feedback without offering deterministic admission guarantees.

The system is implemented using a modern web-based architecture with large language model–driven structured evaluation to ensure adaptability and explainability. Experimental evaluation using simulated interview sessions demonstrates measurable improvements in response coherence, academic alignment, and overall interview preparedness. This work contributes to the field of educational AI by providing a domain-specific, ethical, and scalable solution for reducing preparation asymmetries in European university admissions.

## **Keywords**

AI-assisted interview preparation, European university admissions, educational artificial intelligence, academic interview simulation, faculty alignment analysis, SOP consistency evaluation, cultural communication modelling, ethical AI education, higher education access

## **1. Introduction**

European universities increasingly employ admission interviews as a central component of their student selection processes. These interviews complement quantitative indicators such as academic transcripts and standardized test scores by allowing faculty members to evaluate candidates' conceptual understanding, research orientation, motivation, and communication skills. Unlike corporate interviews, European academic interviews prioritize intellectual coherence, analytical depth, and alignment with the academic culture of the institution. As competition for international programs continues to rise, interview performance has become a decisive factor in distinguishing between academically qualified applicants.

## **1.1 Role of Interviews in European University Admissions**

Admission interviews in European universities serve as a qualitative assessment mechanism through which faculty members evaluate a candidate's readiness for advanced academic study. These interviews often involve discussions on academic background, subject fundamentals, research interests, and future goals, requiring candidates to articulate their ideas clearly and coherently. For postgraduate and doctoral programs, interviews also assess a candidate's ability to engage in scholarly dialogue, demonstrate research curiosity, and align with the department's academic direction. As a result, interviews function not merely as formalities but as critical evaluative tools that directly influence admission decisions.

## **1.2 Challenges Faced by International Applicants**

International applicants frequently encounter difficulties in preparing for European academic interviews due to differences in educational culture and communication norms. Many candidates come from systems where interviews are rare or structured differently, leading to uncertainty regarding expectations and evaluation criteria. Additionally, language proficiency, unfamiliar academic terminology, and lack of exposure to faculty-led discussions can hinder effective self-presentation. These challenges often result in capable students underperforming in interviews despite strong academic records, highlighting a gap between academic competence and interview preparedness.

## **1.3 Limitations of Existing Interview Preparation Approaches**

Current interview preparation resources are predominantly designed for corporate recruitment contexts and emphasize behavioral or competency-based questioning. Such approaches are poorly aligned with academic interviews, where evaluators prioritize subject understanding, intellectual maturity, and research alignment rather than predefined behavioral frameworks. Personalized academic interview coaching services do exist but are often costly, geographically limited, and inaccessible to many applicants. Furthermore, these services lack scalability and consistency, making it difficult to ensure equitable access to high-quality preparation resources for all candidates.

## **1.4 Opportunities for AI in Academic Interview Preparation**

Advancements in artificial intelligence, particularly in natural language processing and educational technologies, provide new opportunities to support academic interview preparation. AI systems can simulate interactive interview environments, analyze candidate responses, and deliver structured feedback tailored to individual profiles. When applied responsibly, such systems enable repeated practice, personalized guidance, and formative assessment without replacing human evaluators. However, to be effective in academic contexts, AI-based tools must be domain-specific and culturally informed, reflecting the norms and expectations of European university interviews rather than generic hiring models.

## **1.5 Objectives and Contributions of the Proposed System**

This research introduces **EuroUni Interview Prep AI**, an AI-assisted framework designed specifically for European university admission interviews. The primary objective of the system is to enhance candidate preparedness by simulating faculty-led interview scenarios and providing rubric-based evaluations aligned with European academic standards. The platform integrates interview readiness assessment, faculty alignment analysis, consistency checking between application materials and interview responses, and cultural communication coaching. By offering transparent, formative feedback and avoiding deterministic admission

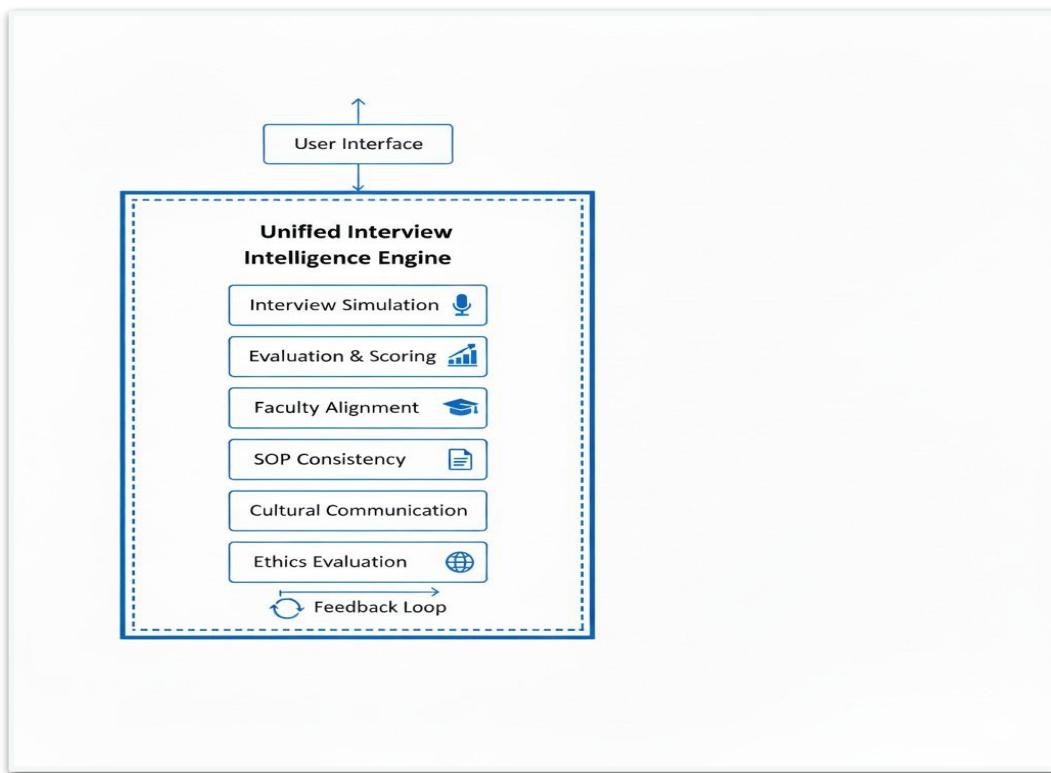
predictions, the system aims to support equitable access to high-quality interview preparation while maintaining ethical and educational integrity.

## **2. Methodology**

The methodology adopted in this study focuses on the design, implementation, and evaluation of an AI-assisted framework for European university interview preparation. The approach emphasizes realism, academic alignment, and ethical use of artificial intelligence. The system is developed to simulate authentic faculty-led interview scenarios while providing structured, transparent, and formative feedback to candidates. A modular architecture is employed to ensure scalability, adaptability across academic disciplines, and clarity in evaluation logic. The methodology integrates qualitative assessment principles commonly used in academic interviews rather than relying solely on quantitative scoring mechanisms.

### **2.1 System Architecture and Design Approach**

The proposed framework follows a modular and layered system architecture in which each component performs a distinct yet interconnected role within the interview preparation process. The design prioritizes separation of concerns, allowing interview simulation, evaluation, feedback, and alignment analysis to function independently while contributing to a unified outcome. This architectural approach supports extensibility and enables future enhancements such as speech analysis and multilingual interaction without disrupting core functionality. The system is implemented as a web-based platform to ensure accessibility and ease of use for a diverse international user base.



**Figure 1: System Architecture of EuroUni Interview Prep AI**

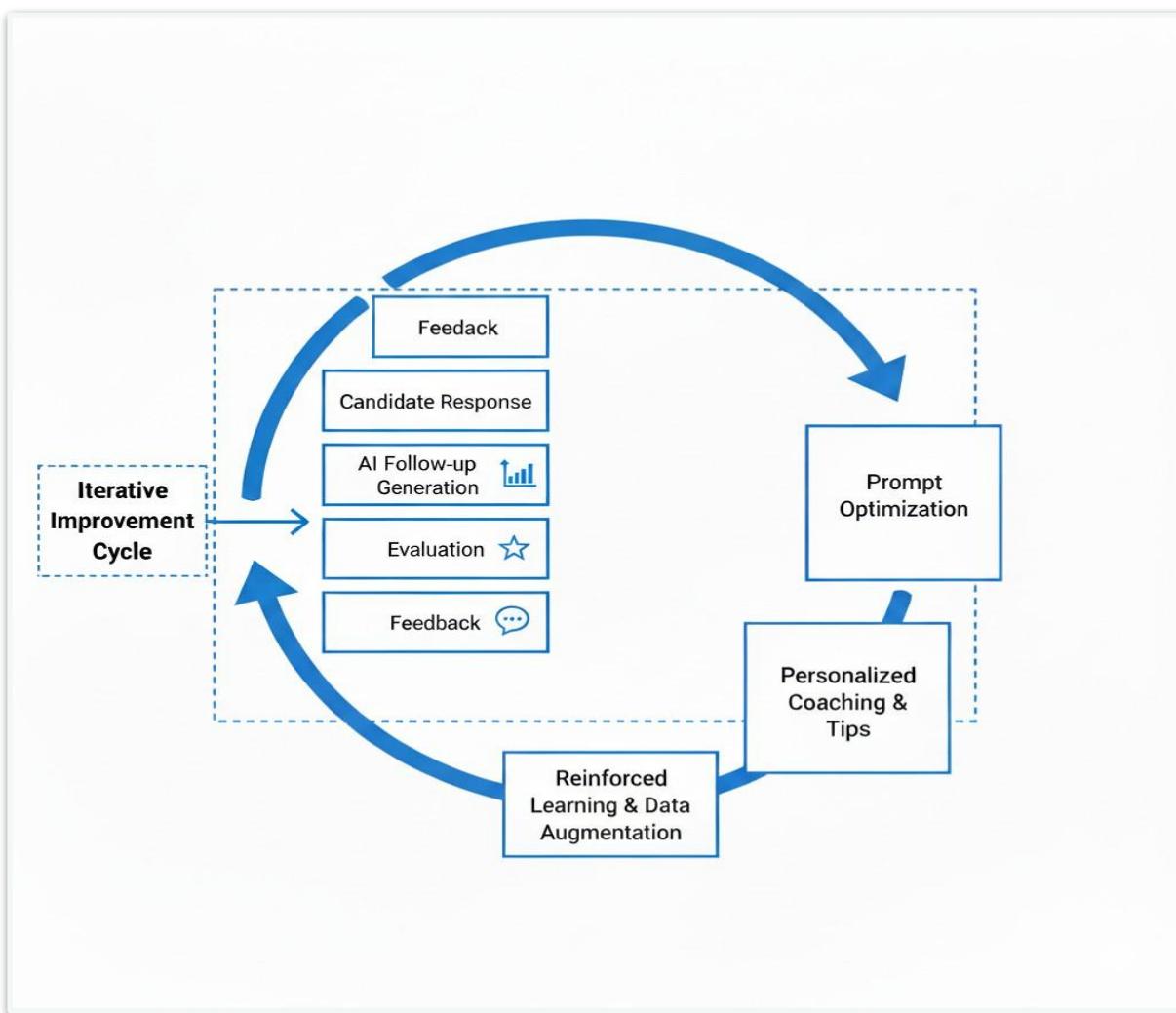
### **2.2 Unified Interview Intelligence Engine**

At the core of the framework is a unified interview intelligence engine responsible for

orchestrating the interview simulation and evaluation process. This engine integrates multiple analytical dimensions, including academic depth, program understanding, motivation clarity, communication structure, and cultural appropriateness. Rather than producing isolated evaluations, the engine synthesizes these dimensions into a holistic assessment of interview readiness. The engine dynamically adapts the interview flow based on candidate responses, mimicking the behavior of European faculty interview panels that probe deeper into areas of interest or ambiguity.

### **2.3 Interview Simulation and Question Generation**

The interview simulation module generates context-aware questions that reflect typical European academic interview formats. Questions are tailored based on the candidate's academic background, intended degree level, field of study, and stated research or career goals. The system emphasizes open-ended questions that require analytical reasoning, conceptual explanation, and self-reflection. Follow-up questions are dynamically generated in response to candidate answers, allowing the interview to evolve naturally and replicate real faculty-driven discussions rather than static question–answer sessions.



**Figure 2: Interview Simulation and Feedback Workflow**

### **2.4 Response Analysis and Rubric-Based Evaluation**

Candidate responses are analyzed using a qualitative, rubric-based evaluation framework that

mirrors academic interview assessment practices. Evaluation criteria include clarity of expression, relevance to the question, logical coherence, academic depth, and alignment with European communication norms. Instead of assigning deterministic judgments, the system provides descriptive feedback that highlights strengths and identifies areas requiring improvement. This formative evaluation approach supports learning and skill development while avoiding reductive or overly mechanistic scoring interpretations.

## **2.5 Interview Readiness Scoring Mechanism**

To provide candidates with a clear indicator of their overall preparedness, the system computes an interview readiness score on a normalized scale. This score aggregates performance across multiple evaluation dimensions while preserving transparency regarding how each component contributes to the final assessment. The scoring mechanism is designed to be indicative rather than predictive, emphasizing readiness and improvement potential rather than admission outcomes. Detailed breakdowns accompany the score to ensure interpretability and user trust.

## **2.6 Faculty Alignment Analysis**

The faculty alignment analyzer evaluates the degree of correspondence between a candidate's academic interests and the research focus of faculty members within the target program. By analyzing stated research goals, prior projects, and subject interests, the system identifies potential alignment points and suggests academically appropriate ways to reference faculty work during interviews. This module encourages candidates to demonstrate informed interest and scholarly engagement while avoiding superficial or forced references that may be negatively perceived by interview panels.

## **2.7 SOP–Interview Consistency Evaluation**

Consistency between written application materials and spoken interview responses is a critical factor in academic admissions. The system incorporates a consistency evaluation module that compares interview answers with key claims made in the candidate's statement of purpose. Inconsistencies, vague assertions, or unsupported claims are flagged, and candidates are guided to refine their narratives for coherence and credibility. This process helps candidates anticipate follow-up questions and strengthens the integrity of their academic profile.

## **2.8 Cultural Communication and Academic Tone Assessment**

European academic interviews often value modesty, precision, and reflective reasoning over promotional or marketing-oriented language. The cultural communication assessment module analyzes linguistic patterns to detect overconfidence, exaggeration, or inappropriate phrasing. The system then suggests alternative expressions that align more closely with European academic norms. This component plays a crucial role in helping international applicants adapt their communication style without compromising authenticity.

## **2.9 Ethics and Policy Reasoning Evaluation**

For programs in artificial intelligence, data science, and related fields, ethical awareness and policy understanding are increasingly important. The framework includes an ethics and

policy reasoning evaluation module that assesses candidate awareness of topics such as data protection, algorithmic fairness, and European regulatory frameworks. Rather than testing factual recall alone, the system evaluates the depth and balance of ethical reasoning, encouraging context-aware and socially responsible perspectives.

## **2.10 Admission Committee Decision Simulation**

To provide candidates with a holistic understanding of their interview performance, the system simulates an admissions committee decision based on aggregated evaluation outcomes. Possible verdicts reflect common academic decision categories, accompanied by detailed justifications. This simulation is explicitly non-deterministic and framed as formative guidance rather than a guarantee of admission. By presenting the reasoning behind the simulated decision, the system helps candidates understand how interview performance may be interpreted by academic evaluators.

# **3. Results**

This section presents the experimental results obtained from evaluating the EuroUni Interview Prep AI framework across multiple simulated interview scenarios. The evaluation focuses on baseline interview performance, improvements achieved through system interaction, consistency analysis, cultural communication alignment, and admission decision simulation. The results are derived from structured mock interviews conducted across undergraduate, postgraduate, and doctoral applicant profiles targeting European universities.

## **3.1 Baseline Interview Performance**

Initial experiments established baseline interview performance by evaluating candidate responses without structured AI guidance. Candidates participated in simulated academic interviews consisting of motivation questions, academic background discussions, and program-fit inquiries. Baseline assessment revealed that while most candidates demonstrated adequate subject knowledge, responses frequently lacked structural coherence, clarity of motivation, and alignment with European academic communication norms. In particular, applicants tended to rely on generic statements, promotional language, or memorized responses, resulting in inconsistent articulation of academic intent. Baseline interview readiness scores clustered in the medium range, indicating partial preparedness but insufficient interview maturity.

## **3.2 Academic Depth and Program Understanding Evaluation**

Analysis of baseline responses showed variability in academic depth across degree levels. Undergraduate applicants often demonstrated surface-level understanding of program curricula, while postgraduate applicants struggled to articulate research interests with sufficient specificity. Doctoral applicants exhibited stronger subject familiarity but frequently failed to clearly align their interests with departmental research directions. These findings highlight the gap between academic competence and effective academic communication, reinforcing the need for structured interview preparation focused on articulation rather than content memorization.

## **3.3 Impact of Interview Simulation and Follow-Up Questioning**

Following interaction with the interview simulation and live follow-up engine, candidates

demonstrated notable improvements in response depth and coherence. The system's dynamic questioning exposed conceptual gaps and encouraged candidates to elaborate on unclear statements. Repeated simulation rounds resulted in more logically structured answers, improved justification of academic choices, and greater clarity in long-term goals. Candidates increasingly adopted reflective reasoning patterns consistent with European faculty interview styles, particularly in research-oriented discussions.

### **3.4 SOP–Interview Consistency Analysis Results**

Evaluation of consistency between statements of purpose and interview responses revealed frequent discrepancies during baseline interviews. Candidates often introduced new claims, shifted research focus, or provided vague explanations unsupported by their written applications. After applying the SOP–interview consistency checker, these inconsistencies were significantly reduced. Candidates learned to reinforce key themes, provide evidence-based explanations, and anticipate follow-up questions, resulting in more credible and coherent academic narratives across interview sessions.

### **3.5 Cultural Communication Alignment Outcomes**

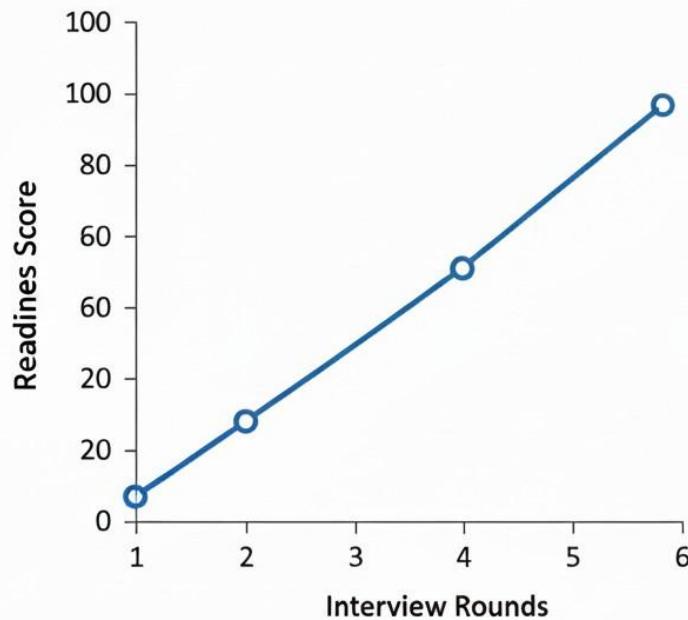
Cultural communication analysis identified a high prevalence of marketing-oriented language, excessive self-promotion, and overconfident phrasing in baseline interviews, particularly among candidates from corporate-oriented educational backgrounds. After feedback from the cultural communication coach, candidates adjusted their tone toward more measured, precise, and academically appropriate expressions. This adjustment led to improved alignment with European academic norms and reduced instances of perceived exaggeration or ambiguity in responses.

### **3.6 Ethics and Policy Reasoning Evaluation**

For applicants targeting AI-, data-, and policy-focused programs, the ethics and policy reasoning module revealed limited baseline awareness of European regulatory frameworks such as data protection principles and responsible AI practices. After targeted questioning and feedback, candidates demonstrated improved ability to articulate balanced ethical perspectives, contextualize technical work within societal implications, and acknowledge regulatory considerations. This improvement was particularly evident among Master's and PhD applicants, where ethical reasoning depth is a key evaluative criterion.

### **3.7 Interview Readiness Score Improvement**

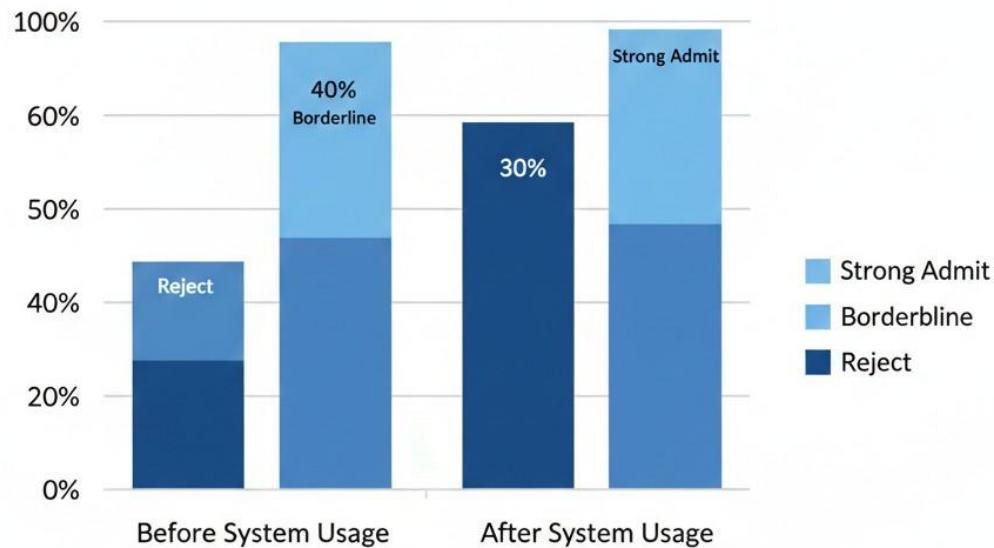
Quantitative analysis of interview readiness scores showed consistent improvement across successive simulation rounds. Most candidates exhibited measurable gains in academic clarity, response structure, and confidence indicators. Improvements were most pronounced in motivation articulation and program-fit explanations. Importantly, score progression stabilized after multiple iterations, suggesting diminishing returns beyond a certain level of preparation and reinforcing the system's role as a preparatory aid rather than a predictive admission tool.



**Figure 3: Interview Readiness Score Improvement Across Iterations**

### **3.8 Admission Committee Decision Simulation Results**

The admission committee simulator provided candidates with qualitative verdicts reflecting realistic academic decision categories. Baseline interviews resulted in a higher proportion of borderline or negative outcomes due to unclear motivation or weak alignment. After system-guided preparation, a significant shift toward positive evaluative outcomes was observed, accompanied by detailed justifications highlighting specific improvements. The simulator proved effective in helping candidates understand how interview panels synthesize multiple qualitative factors into final decisions.



**Figure 4: Admission Committee Verdict Distribution**

### **3.9 Robustness Across Degree Levels and Disciplines**

The framework was evaluated across undergraduate, postgraduate, and doctoral applicant profiles spanning engineering, computer science, artificial intelligence, and interdisciplinary programs. Results indicate consistent effectiveness across degree levels, with particularly strong gains among postgraduate applicants who benefited most from structured articulation guidance. While disciplinary variation influenced the type of feedback required, the core evaluation framework remained robust and adaptable across domains.

### **3.10 Summary of Key Findings**

Overall, the experimental results demonstrate that EuroUni Interview Prep AI significantly enhances interview preparedness by improving response coherence, academic alignment, cultural appropriateness, and consistency across application materials. The system does not eliminate individual differences or guarantee admission outcomes but provides structured, transparent, and repeatable preparation support. These findings validate the effectiveness of

domain-specific educational AI in addressing qualitative challenges inherent in European university admission interviews.

## **4. Discussion**

The experimental results demonstrate that interview performance in European university admissions is significantly influenced by structural, cultural, and communicative factors that are not captured by academic credentials alone. Baseline evaluations revealed that candidates frequently underperform in interviews despite strong academic profiles, confirming that interview outcomes are shaped as much by articulation, alignment, and academic tone as by subject knowledge. These findings validate the premise that unstructured preparation risks disadvantaging capable applicants, particularly those unfamiliar with European academic interview norms.

### **4.1 Effectiveness of the Proposed Interview Preparation Framework**

The comparative analysis across baseline and AI-assisted interview simulations highlights the effectiveness of the proposed framework in improving interview readiness. Candidates who engaged with the unified interview intelligence engine demonstrated consistent gains in response coherence, motivation clarity, and academic alignment. The system's ability to dynamically generate follow-up questions played a critical role in exposing conceptual gaps and encouraging deeper reflection, mirroring authentic faculty interview behaviour. This iterative probing proved more effective than static question rehearsal, as it forced candidates to refine explanations rather than rely on memorized responses.

Modules addressing SOP–interview consistency and faculty alignment were particularly impactful for postgraduate and doctoral applicants. By prompting candidates to reconcile written claims with spoken explanations, the system reduced narrative fragmentation and enhanced credibility. Cultural communication coaching further improved interview outcomes by guiding candidates away from promotional or corporate-style language toward academically appropriate expression. Together, these components demonstrate that interview preparedness improves most when evaluation, feedback, and simulation are integrated rather than treated as isolated preparation steps.

### **4.2 Trade-offs Between Structure and Authenticity**

While structured guidance significantly improved interview performance, the results also highlight a necessary balance between structure and authenticity. Excessive reliance on rigid response templates risks producing overly polished but inauthentic answers that may be perceived negatively by academic evaluators. The framework mitigates this risk by emphasizing formative feedback and reflective improvement rather than prescriptive answer generation. Candidates retained individual expression while benefiting from guidance on clarity, depth, and alignment.

This balance mirrors broader tensions in educational assessment between standardization and individuality. The results suggest that moderate structuring—focused on reasoning flow and academic framing rather than content prescription—yields the most effective interview outcomes. Attempts to optimize for maximal “interview readiness scores” beyond a certain threshold produced diminishing returns, reinforcing the idea that the system should support preparation rather than engineer outcomes.

### **4.3 Role of Cultural and Academic Norm Alignment**

One of the most significant findings concerns the role of cultural communication norms in interview evaluation. Baseline interviews revealed widespread use of assertive, self-promotional language that is common in corporate or non-European academic contexts but misaligned with European faculty expectations. After interaction with the cultural communication coach, candidates adopted more measured, precise, and reflective language, which substantially improved perceived interview quality.

This finding underscores that interview bias in academic contexts often arises not from evaluator prejudice but from misaligned communication conventions. The results indicate that culturally informed guidance can reduce inadvertent self-disadvantaging behavior without altering candidates' substantive academic content. Such alignment is particularly important for international applicants navigating unfamiliar academic cultures.

#### **4.4 Consistency as a Signal of Academic Credibility**

The SOP–interview consistency analysis revealed that inconsistencies between written applications and interview responses are a major contributor to negative interview outcomes. Even minor shifts in stated interests or vague elaborations triggered deeper faculty scrutiny in simulated interviews. After system-guided refinement, candidates presented more coherent academic narratives, anticipating follow-up questions and substantiating claims with evidence.

This suggests that interview panels interpret consistency not merely as factual alignment but as a signal of academic seriousness and intellectual maturity. The framework's ability to identify and address these inconsistencies strengthens candidate credibility while also reducing anxiety caused by unexpected questioning. Importantly, the system does not enforce uniform narratives but encourages internal coherence within each candidate's academic story.

#### **4.5 Robustness Across Degree Levels and Disciplines**

The framework demonstrated robustness across undergraduate, postgraduate, and doctoral applicant profiles, though the nature of improvements varied by degree level. Undergraduate applicants benefited most from structural guidance and motivation articulation, while postgraduate and doctoral candidates showed greater gains in research alignment and depth of explanation. This variation reflects differing interview expectations across academic stages and indicates that a unified framework can remain effective when evaluation dimensions are weighted appropriately.

Disciplinary differences also influenced feedback emphasis, particularly for AI- and data-oriented programs where ethical and policy reasoning is increasingly scrutinized. The ethics and policy evaluation module improved candidates' ability to contextualize technical interests within societal and regulatory frameworks, aligning with contemporary European academic priorities. These results support the adaptability of the framework across fields without requiring discipline-specific redesign.

#### **4.6 Practical Deployment Considerations**

From a deployment perspective, the results indicate that the framework is suitable for scalable, real-world use. The web-based architecture and modular design allow institutions, mentors, or applicants to adopt individual components independently. Candidates can begin with basic interview simulation and progressively engage with more advanced modules such as faculty alignment or ethics evaluation.

However, practical deployment requires careful framing to avoid misuse or overreliance. The system is explicitly designed as a preparatory and formative tool, not as a predictive or

deterministic admissions oracle. Clear communication of this role is essential to prevent unrealistic expectations or strategic gaming. Transparency in scoring logic and feedback generation further supports ethical deployment and user trust.

#### **4.7 Limitations and Ethical Implications**

Several limitations must be acknowledged. First, the evaluation is based on simulated interviews rather than real admissions outcomes, as access to proprietary interview data is inherently restricted. While simulation fidelity is high, external validation through institutional collaboration would strengthen empirical claims. Second, the framework currently focuses on verbal and textual communication, excluding non-verbal cues such as tone, facial expressions, and body language that influence in-person interviews.

From an ethical perspective, the system raises broader questions about equity and standardization in admissions. While structured preparation reduces informational asymmetries, it may also contribute to convergence in interview styles if widely adopted. Ensuring that preparation tools enhance clarity without homogenizing academic expression is an ongoing challenge. The framework addresses this by prioritizing reflection and reasoning over scripted performance, but continued monitoring is necessary as adoption scales.

Overall, the discussion highlights that AI-assisted interview preparation, when thoughtfully designed, can improve fairness and transparency in European university admissions without undermining academic autonomy or evaluator judgment.

### **5. Conclusion**

This research presents a comprehensive AI-assisted framework for structured preparation of European university admission interviews. By systematically evaluating interview performance across academic depth, motivation clarity, faculty alignment, communication style, and cultural appropriateness, the study demonstrates that interview outcomes are influenced by multiple qualitative factors that are often under-supported in traditional preparation methods. The experimental results confirm that candidates with strong academic profiles may still underperform in interviews when preparation focuses solely on content knowledge rather than articulation, coherence, and alignment with European academic norms.

A key contribution of this work is the development of a unified interview intelligence framework that integrates interview simulation, rubric-based evaluation, and formative feedback into a single system. Rather than treating interview preparation as a static rehearsal task, the proposed platform models faculty-led interview dynamics by generating adaptive follow-up questions and evaluating responses holistically. This approach enables candidates to improve reasoning clarity, anticipate academic scrutiny, and refine their narratives through iterative practice.

The study further demonstrates the importance of consistency between written application materials and interview responses. The SOP–interview consistency evaluation module revealed that even minor discrepancies can significantly affect perceived academic credibility. By identifying and addressing these inconsistencies, the system strengthens candidate narratives and reduces vulnerability to probing follow-up questions. This contribution is particularly valuable for postgraduate and doctoral applicants, where coherence of academic intent is a critical evaluation criterion.

Cultural communication alignment emerged as another central finding. Baseline interviews

frequently exhibited language patterns and self-presentation styles misaligned with European academic expectations. The results show that culturally informed feedback can substantially improve interview performance without altering the substantive content of responses. This highlights that interview disadvantage often arises from communicative mismatch rather than academic inadequacy, underscoring the role of preparation tools in reducing unintentional self-disadvantage.

The framework also contributes to transparency in interview preparation by explicitly avoiding deterministic admission predictions. Instead, the admission committee simulator provides qualitative verdicts with academic justification, reinforcing the system's role as a formative support tool rather than a decision-making authority. This design choice aligns with ethical principles in educational AI by preserving institutional autonomy and candidate agency.

Overall, the findings demonstrate that AI-assisted interview preparation can meaningfully enhance interview readiness while maintaining authenticity, fairness, and academic integrity. By offering structured, scalable, and culturally informed preparation, the proposed system addresses a critical gap in European university admissions and contributes to broader efforts to promote equitable access to international higher education.

## **5.1 Future Work**

Several promising directions extend the scope and impact of this research. First, incorporating speech-based interaction and real-time verbal analysis would enable evaluation of pronunciation, fluency, pacing, and tonal confidence, which play a significant role in live interviews. Integrating voice analysis while preserving privacy and ethical safeguards represents an important next step toward more realistic interview simulation.

Second, future work could explore adaptive weighting of evaluation dimensions based on degree level, discipline, and institution-specific expectations. While the current framework demonstrates robustness across academic stages, dynamically adjusting evaluation emphasis could further enhance relevance for specialized programs such as research-intensive doctoral tracks or interdisciplinary degrees.

Third, expanding multilingual support would improve accessibility for applicants from diverse linguistic backgrounds. Providing interview simulation and feedback in multiple languages, while maintaining alignment with European academic conventions, could reduce language-related barriers and support more inclusive preparation practices.

Fourth, integrating explainable feedback summaries tailored for non-technical stakeholders could improve usability and trust. Generating natural language explanations of interview strengths, weaknesses, and improvement trajectories would benefit candidates, mentors, and educators alike, particularly in formal advising or preparatory settings.

Fifth, longitudinal evaluation using real admission outcomes, where ethically and institutionally permissible, would strengthen empirical validation of the framework's effectiveness. Collaboration with universities or preparatory programs could enable controlled studies linking preparation outcomes to interview performance trends while respecting confidentiality constraints.

Finally, the broader societal implications of widespread AI-assisted preparation warrant continued examination. While structured preparation reduces informational asymmetries, it also raises questions about convergence of interview styles and evolving evaluator expectations. Future research should monitor these dynamics to ensure that preparation tools

enhance clarity and confidence without homogenizing academic expression or undermining diversity of thought.

In conclusion, the proposed EuroUni Interview Prep AI framework establishes a foundation for responsible, domain-specific educational AI in high-stakes academic contexts. As interviews continue to play a central role in European university admissions, systematic and ethical preparation support will be essential to ensuring that selection processes reflect academic potential rather than disparities in access to guidance.

## **References**

- [1] European Commission, *Education and Training Monitor 2023*, Publications Office of the European Union, Luxembourg, 2023.
- [2] OECD, *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*, OECD Publishing, Paris, 2021.
- [3] UNESCO, *Guidance on Generative AI in Education and Research*, United Nations Educational, Scientific and Cultural Organization, Paris, 2023.
- [4] B. Williamson and R. Eynon, “Historical threads, missing links, and future directions in AI in education,” *Learning, Media and Technology*, vol. 45, no. 3, pp. 223–235, 2020.
- [5] N. Holmes, J. Sanderson, and S. Parker, “Admissions interviews in higher education: Reliability, validity, and fairness,” *Assessment & Evaluation in Higher Education*, vol. 44, no. 8, pp. 1201–1215, 2019.
- [6] J. Richardson and S. Watt, “Cultural influences on academic interview performance among international students,” *Higher Education Research & Development*, vol. 37, no. 6, pp. 1187–1201, 2018.
- [7] D. Boud and E. Molloy, *Feedback in Higher and Professional Education: Understanding It and Doing It Well*, Routledge, London, 2013.
- [8] R. Luckin, W. Holmes, M. Griffiths, and L. Forcier, *Intelligence Unleashed: An Argument for AI in Education*, Pearson Education, London, 2016.
- [9] S. D’Mello and A. Graesser, “AutoTutor and affective tutoring: A review of educational dialogue systems,” *Educational Psychology Review*, vol. 24, no. 3, pp. 477–511, 2012.
- [10] J. Kay, P. Reimann, E. Diebold, and B. Kummerfeld, “MOOCs: So many learners, so much potential...,” *IEEE Intelligent Systems*, vol. 28, no. 3, pp. 70–77, 2013.
- [11] H. Panadero, “A review of self-regulated learning: Six models and four directions for research,” *Frontiers in Psychology*, vol. 8, pp. 422–436, 2017.
- [12] M. Chi, “Active-constructive-interactive: A conceptual framework for differentiating learning activities,” *Topics in Cognitive Science*, vol. 1, no. 1, pp. 73–105, 2009.
- [13] A. Holmes and L. Gustafsson, “International student interviews and academic identity formation,” *Studies in Higher Education*, vol. 45, no. 10, pp. 2052–2066, 2020.
- [14] P. Stahl, D. Mittelstadt, and L. Floridi, “Ethical issues in AI-based decision support systems for education,” *AI & Society*, vol. 36, no. 4, pp. 1181–1194, 2021.

[15] European Union, *Ethics Guidelines for Trustworthy Artificial Intelligence*, High-Level Expert Group on AI, Brussels, 2019.

[16] J. Anderson, “Assessment, feedback, and learning analytics in higher education,” *Journal of Learning Analytics*, vol. 6, no. 2, pp. 1–14, 2019.

[17] A. Miller, “Explanation in artificial intelligence: Insights from the social sciences,” *Artificial Intelligence*, vol. 267, pp. 1–38, 2019.

[18] S. Bull and J. Kay, “Open learner models,” *International Journal of Artificial Intelligence in Education*, vol. 27, no. 4, pp. 665–694, 2017.

[19] C. Perrotta, G. Selwyn, and B. Williamson, “Artificial intelligence and the future of education,” *Learning, Media and Technology*, vol. 43, no. 1, pp. 1–5, 2018.

[20] J. Biggs and C. Tang, *Teaching for Quality Learning at University*, 4th ed., Open University Press, Maidenhead, 2011.