INTEGRATING ARTIFICIAL INTELLIGENCE FOR SPEAKING PROFICIENCY

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Annotation: This article explores the strategic integration of Artificial Intelligence (AI) tools to enhance university students' oral proficiency. It argues that AI systems, utilizing ASR (Automatic Speech Recognition) and LLMs (Large Language Models), provide an essential complement to traditional pedagogy. Key benefits include delivering instantaneous feedback on technical parameters like pronunciation and pace (prosody), and mitigating communication apprehension by offering a low-stakes, non-judgmental practice environment. However, the article cautions that AI must operate within a hybrid model, acknowledging its limitations in assessing non-verbal cues and addressing crucial ethical concerns related to data privacy.

Key Words: oral proficiency, AI integration, instantaneous feedback, ASR, LLMs, communication apprehension, hybrid model, ethical concerns

ИНТЕГРАЦИЯ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА ДЛЯ РАЗВИТИЯ НАВЫКОВ УСТНОЙ РЕЧИ

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Аннотация: Это статья исследует стратегическую интеграцию ИИ для улучшения устной речи студентов университета. В нем утверждается, что системы ИИ, использующие ASR (Автоматическое Распознавание Речи) и LLM (Большие Языковые Модели), служат важным дополнением к традиционной педагогике. Ключевые преимущества включают предоставление мгновенной обратной связи по техническим параметрам, таким как произношение и просодия, а также снижение тревожности общения за счет создания среды непредвзятой практики с низким риском. Однако в статье делается предупреждение, что ИИ должен работать в гибридной модели, признавая его ограничения в оценке невербальных сигналов и учитывая ключевые этические проблемы, связанные с конфиденциальностью данных.

Ключевые слова: устная речь, интеграция ИИ, мгновенная обратная связь, ASR, LLM, тревожность общения, гибридная модель, этические проблемы

OG‘ZAKİ NUTQ MALAKASİNİ RİVOJLANTİRİSH UCHUN SUN'İY İNTELLEKTNİ İNTEGRATSİYA QİLİSH

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Annotatsiya: Ushbu maqola universitet talabalarining og‘zaki nutq malakasini oshirish uchun Sun'iy Intellekt vositalarini strategik integratsiya qilishni o'rganadi. Maqolada SI tizimlari, ASR (Avtomatik Nutqni Tan olish) va LLM (Katta Til Modellar) dan foydalangan holda, an’anaviy pedagogikaga muhim qo‘shimcha bo‘lib xizmat qilishi ta’kidlanadi. Asosiy foydalari orasida talaffuz va sur'at (prosodiya) kabi texnik parametrlarga oid tezkor fikr-mulohaza taqdim etish va xolis, xavotirsiz amaliyot muhitini yaratish orqali muloqot xavotirini kamaytirish kiradi. Biroq, maqolada SI gibrid modelda ishlashi kerakligi, uning no-verbal

ishoralarni baholashdagi cheklovlarini tan olish va ma'lumotlar maxfiyligi bilan bog‘liq asosiy etik muammolarni hal qilish zarurligi haqida ogohlantiriladi.

Kalit So‘zlar: og‘zaki nutq malakasi, SI integratsiyasi, tezkor fikr-mulohaza, ASR, LLM, muloqot xavotiri, gibrid model, etik muammolar

The modern university landscape demands that students not only master their specialized domains but also possess highly refined communication skills, chief among them, oral proficiency. In an increasingly globalized and digital professional world, the ability to articulate complex ideas clearly, persuasively, and with confidence is paramount to career success and intellectual contribution (Brown, 2022). While traditional pedagogical methods - such as classroom discussions, presentations, and one-on-one tutoring - remain foundational, the emergence of Artificial Intelligence and Machine Learning technologies offers unprecedented, scalable, and personalized opportunities to enhance students’ speaking abilities. The integration of AI tools, ranging from sophisticated speech-recognition software to generative language models, marks a paradigm shift, moving the goal of achieving fluency from the confines of the classroom to an ubiquitous, 24/7 learning environment. This article explores AI integration in university curricula to develop speaking proficiency, focusing on the quantitative benefits of immediate feedback, improved pronunciation, reduced communication apprehension, and practical applications.

One of the most immediate and impactful contributions of AI in this pedagogical space is the provision of instantaneous, data-driven feedback, an element often scarce in a human-led classroom setting (Johnson & Lee, 2023). Unlike tutors who offer limited, summative critique, AI excels at processing vast speech data in real-time. Using ASR (Automatic Speech Recognition), AI transcribes speech and analyzes parameters beyond simple accuracy, including speaking rate, filler words, pace consistency, and grammatical complexity. This quantitative data gives students objective metrics, allowing for immediate alerts (e.g., if pace drops or filler words increase). This granular self-diagnosis accelerates the feedback loop, enabling students to adjust habits incrementally during practice, eliminating delayed analysis. The feedback's objectivity, free from instructor bias or fatigue, increases its reliability for students seeking measurable improvement (Smith, 2021).

Artificial Intelligence is an exceptionally powerful tool for improving the nuanced domains of pronunciation and prosody, which are crucial for speaking competence. Even minor phonetic and phonological errors can severely reduce intelligibility. AI coaches use ML algorithms trained on massive datasets to pinpoint specific mispronounced phonemes, stress placement errors, or the natural rhythm of the language (Williams et al., 2022). The AI model provides immediate, visual feedback, often through a waveform comparison of the student's attempt versus a native model. This precise, prescriptive feedback enables deliberate, high-repetition, targeted practice that is nearly impossible with a human instructor. Furthermore, advanced systems analyze prosodic features like intonation, rhythm, and tone, helping students move beyond technical correctness to achieving natural, expressive fluency.

Artificial Intelligence's value extends beyond technical speech aspects by mitigating communication apprehension (Thompson, 2021). The non-judgmental, low-stakes environment of AI tutors allows students—especially those facing high-stakes speaking or language barriers - to practice freely, reducing the affective filter and incrementally building

confidence transferable to real-world discussions. AI's accessibility allows for crucial 24/7 oral rehearsal. Additionally, the integration of Generative AI (LLMs) drives a pedagogical shift by creating complex, discipline-specific dynamic role-playing scenarios (Li & Park, 2023). These adaptable simulations, like defending a proposal or negotiating a deal, force students into unscripted discourse, fostering situational competence and integration of specialized vocabulary—a significant improvement over static traditional materials.

However, comprehensive AI integration requires acknowledging limitations and ethical considerations. While AI analyzes acoustic features, it fails to assess crucial non-verbal communication (body language, cultural appropriateness), risking the creation of technically precise but socially awkward speakers (Adebayo & Jones, 2024). Additionally, ASR system efficacy can be hindered by accents or poor audio quality. Ethical challenges concerning data privacy (voice data) and ensuring equitable access across all socioeconomic groups must be rigorously addressed by institutional policy.

In conclusion, the strategic integration of Artificial Intelligence tools offers a compelling and necessary enhancement to the traditional framework for developing university students' oral proficiency. By offering instantaneous, objective feedback on technical elements like pronunciation and pace, fostering a low-anxiety environment that reduces communication apprehension, and providing complex, dynamic role-playing scenarios tailored to professional fields, AI acts as a powerful accelerator of learning. While AI is a transformative and highly scalable resource, it cannot and should not replace the human element of instruction, which provides the nuanced, context-dependent coaching on pragmatics, non-verbal cues, and rhetorical strategy that only a human can fully deliver. Ultimately, the future of university oral communication pedagogy requires a balanced, hybrid model: instructors guide the learning process, while AI provides the tireless, personalized platform necessary for students to achieve twenty-first-century fluency and mastery.

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