

ISSAI

NAZARBAYEV
UNIVERSITY

Institute *of* Smart Systems
and Artificial Intelligence

Established in **2010**, Astana, Kazakhstan – the heart of Eurasia

8,000+ students (48% female, 36% graduate level, and **326** international)

516 faculty members from **55** countries

- **37%** local faculty
- **35%** female faculty

8 Schools – Computing & Artificial Intelligence, Sciences & Humanities, Medicine, Mining & Geosciences, Business, Education, Public Policy, and Preparatory Studies

NU established **the School of Computing and Artificial Intelligence (SCAI)** as a regional hub for education, research, and innovation in AI, data science, and advanced computing.

Founding member of the **Asian Universities Alliance (AUA)**

Rankings & Recognition:

- **401–500 band** in Times Higher Education ranking
- **#1 university** in Central Asia and the Caucasus
- **#4** in the CIS
- **42 researchers** among the world's top 2% cited scientists
- **26.7 percent** of publications in Top 10% Journal percentile



Institute of Smart Systems and AI

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- **ISSAI** was founded in 2019 as the main driver of AI research in Kazakhstan.
 - In 2024, ISSAI was transformed into an autonomous research institute under Nazarbayev University.
- **ISSAI ecosystem** comprises 70 professionals, including researchers, data scientists, computer engineers, data curators, graduate students, and administrative staff, as well as collaborators.
- For supporting reproducible AI research, ISSAI maintains **the largest repository** of open-source codes, datasets, and pre-trained models in Central Asia.

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ISSAI HuggingFace: <https://huggingface.co/issai>

ISSAI GitHub: <https://github.com/IS2AI>

ISSAI ModelScope: <https://modelscope.cn/organization/issai>



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ISSAI Publications (2020–2026)

- Total Publications: **150+**
- Field-Weighted Citation Impact (FWCI): **1.88**

Publication Venues

- **Journals:** TRO, TMECH, TBIOM, TIFS, THMS, RAS, RAL, IEEE Sensors, JBHI, Scientific Reports.
- **Conferences:** Interspeech, ICASSP, ICRA, IROS, EMBC, IECON, LREC, AIM, HRI, Bigcomp, SII
- **Book series:** Lecture Notes in Computer Science, Civil Engineering, Springer Handbooks

Research Areas

- Natural Language Processing
- Biometrics
- Robotics & Automation
- Wearable AI & Assistive Technologies
- AI for Sustainability

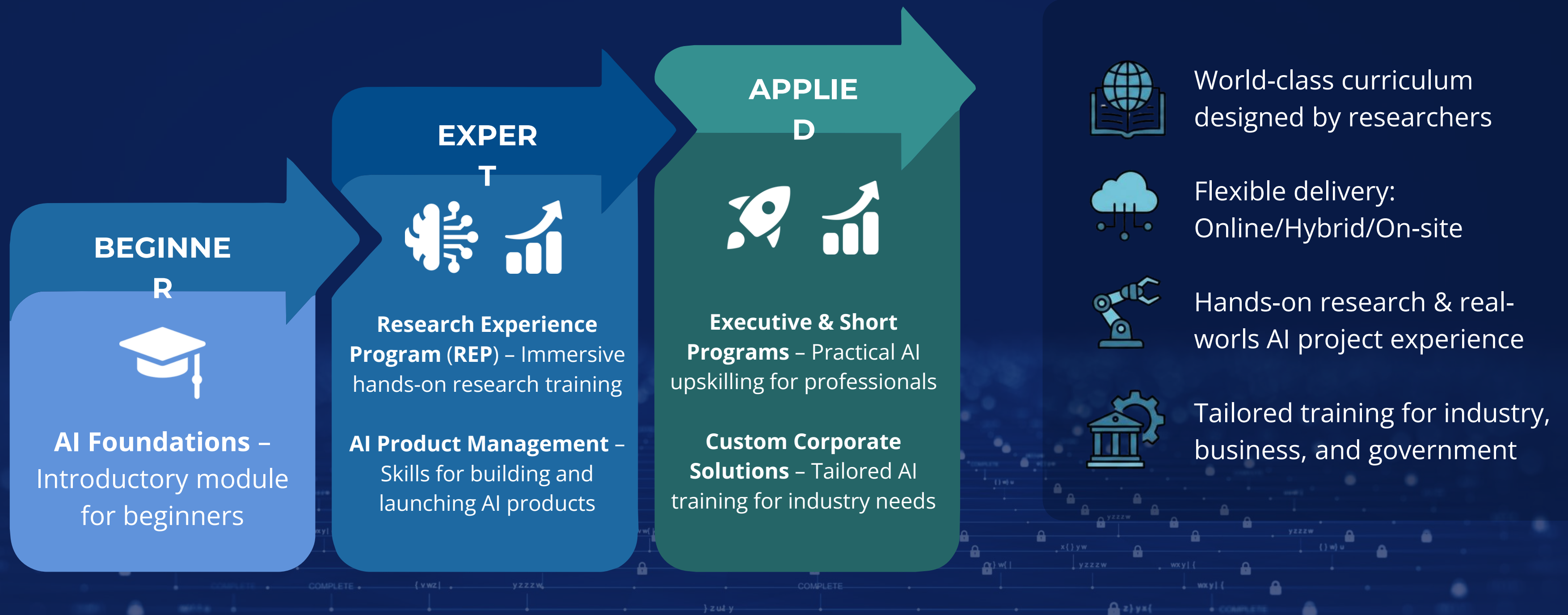
All research at ISSAI is conducted in strict compliance with ethical principles, following the rules of **"AI for Good"** and **"AI for Kazakhstan"**.



Maxutov, A., Arystanbekov, B., Makhataeva, Z., Yergen, A., Taizhanov, N., Nauryzbaikyzy, G., & Varol, H. A. (2026). Introducing cultural knowledge in language models: KazCulture dataset for Kazakh culture. IEEE Access, 14, 44027–44042.

ISSAI AI Education Ecosystem

Empowering the Next Generation of AI Leaders



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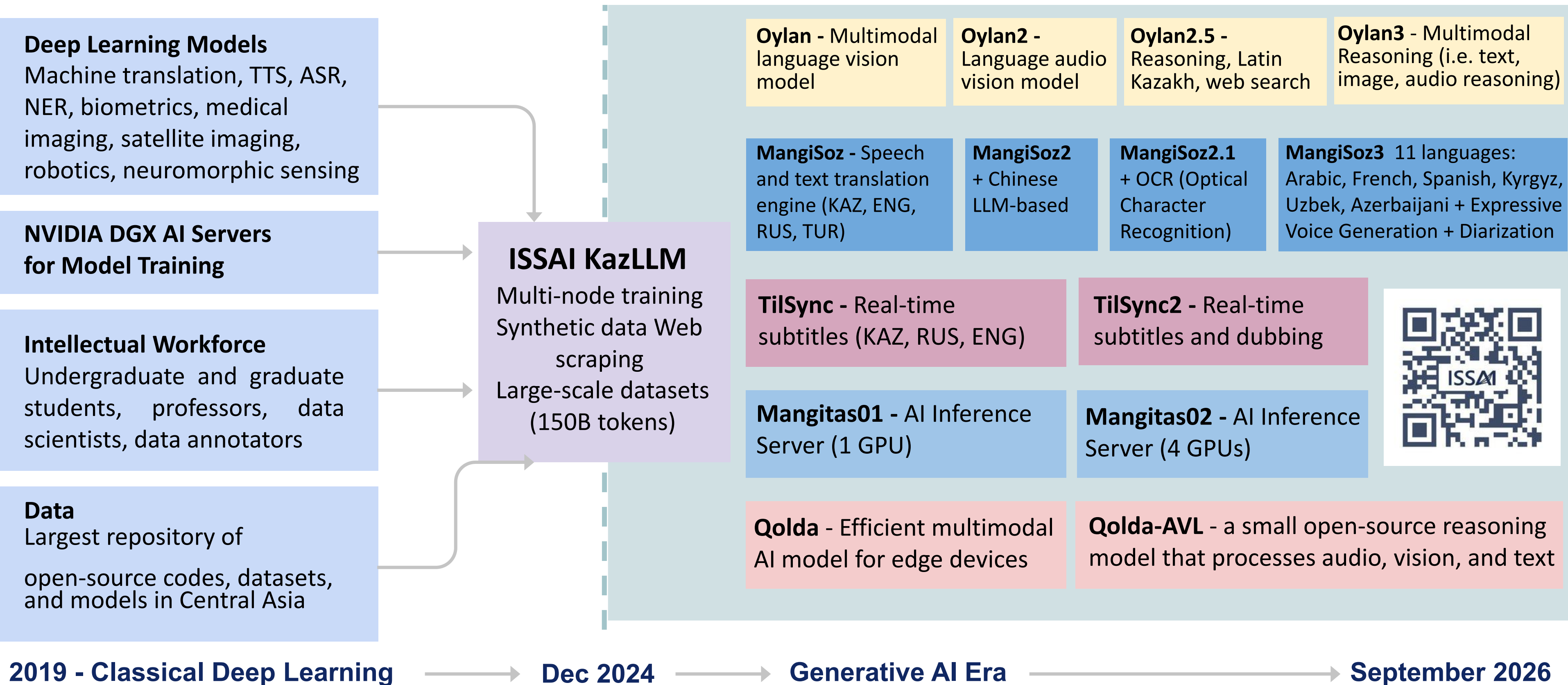
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<https://issai.nu.edu.kz/ai-educational-ecosystem/>



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ISSAI Generative AI Products and Services Tailored for Kazakhstan



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ISSAI VOICE STUDIO

Next-Gen Kazakh AI Voice

ISSAI Voice Studio is a voiceover studio for creating **natural-sounding speech** and dubbing audio and video **while preserving the original speaker's voice**.

- Voice Design Studio: Synthesize speech with full control over gender, age, pitch, accent, and speaking style.
- Dubbing that keeps the voice: Upload a video or audio clip and get a voiceover in another language while preserving the original speaker's identity.
- Emotion & natural expression: Emotional delivery, pauses, and lifelike intonation for truly human-sounding audio.
- Built for long content: Up to 8,000 characters per synthesis, with audio quality from 16 kHz to 24 kHz and faster-than-real-time generation.
- Supports 6 languages: **Kazakh, Russian, English, Uzbek, Kyrgyz, and Turkish**.
- Made for every use case: Podcasts, audiobooks, YouTube dubbing, IVR & bots, ads, news, e-learning, games, and video voiceover.



Thor: Ragnarok (2017)

Dubbed on ISSAI Voice Studio (Original English → Kazakh)



Muhteşem Yüzyıl

Dubbed on **ISSAI Voice Studio** (Original Turkish → English)



Avengers: Doomsday

Dubbed on ISSAI Voice Studio (Original English → Kyrgyz)

Joldas AI

an app for visually impaired people

Joldas AI is a mobile application designed to help visually impaired users interact with the world more independently through AI. The app provides fast and accessible audio assistance for everyday tasks using a simple and user-friendly interface. Currently, available in **Kazakh, Russian and English.**

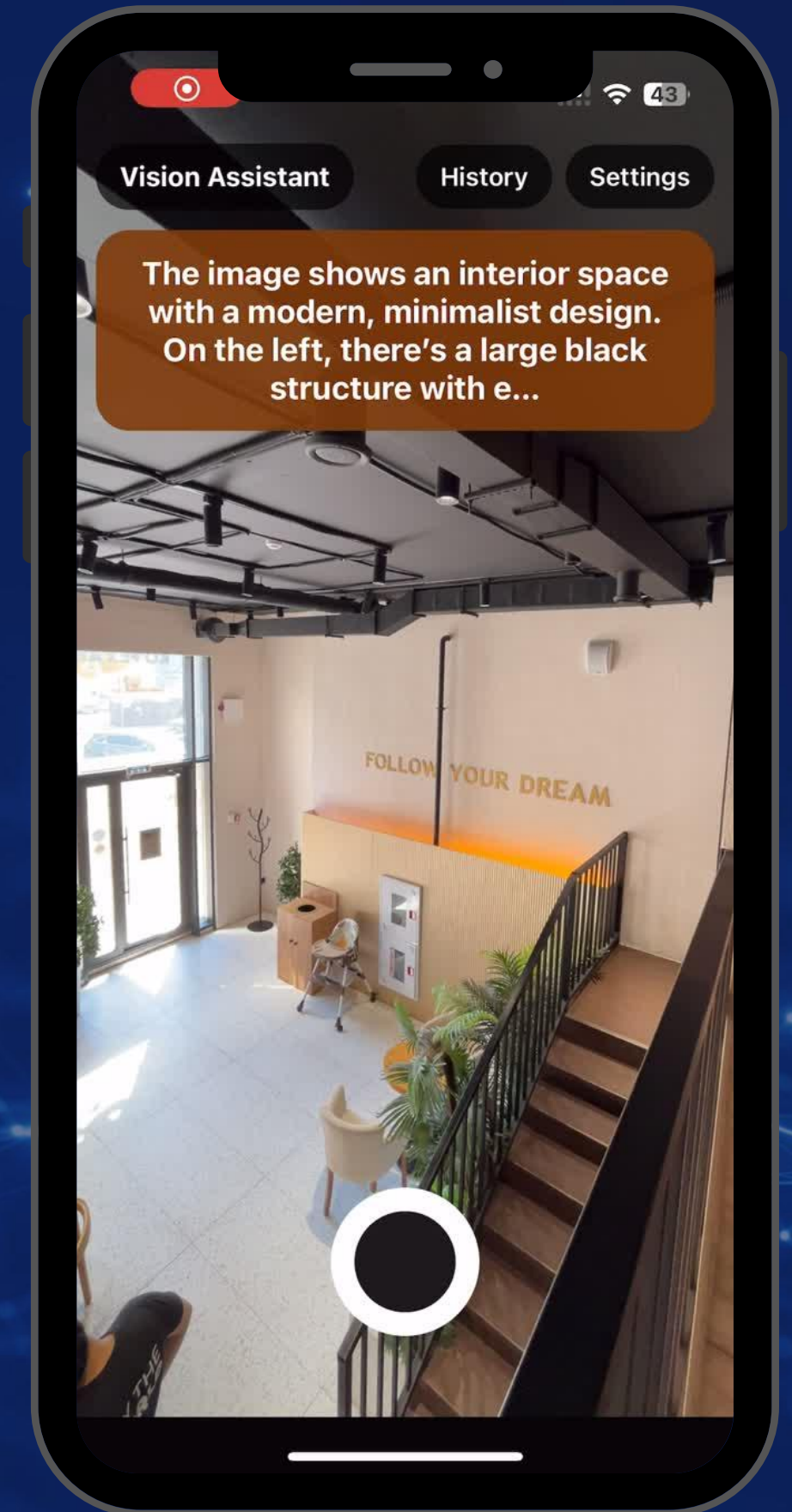
Key features:

1. **Banknote Recognition** (instantly identifies paper currency using the smartphone camera)
2. **OCR Document Reading** (can scan and read printed text aloud)
3. **Scene Description** (describes surrounding environments)

SCAN ME!



available on App
Store



Qolda: Multilingual Compact Audio-Vision-Language Model for Edge Devices

Qolda is an **open-source** multimodal AI family developed by ISSAI and designed for efficient on-device inference on **laptops** and **smartphones** without reliance on high-performance computing infrastructure.

The flagship **Qolda** model is a 4B-parameter language-vision model supporting **Kazakh, Russian, and English**. It enables multimodal reasoning through image-text alignment, document analysis, and visual question answering.

Qolda-AVL includes open-source **5B, 9B and 34B audio-vision-language** models capable of processing audio, images, and text in Kazakh, Russian and English languages. It is the first open-source Kazakh language model with audio processing capabilities.

Qolda makes advanced AI technologies accessible to researchers, developers, students, educators, and small businesses while supporting inclusive AI development for low-resource languages.



Open Source
Initiative

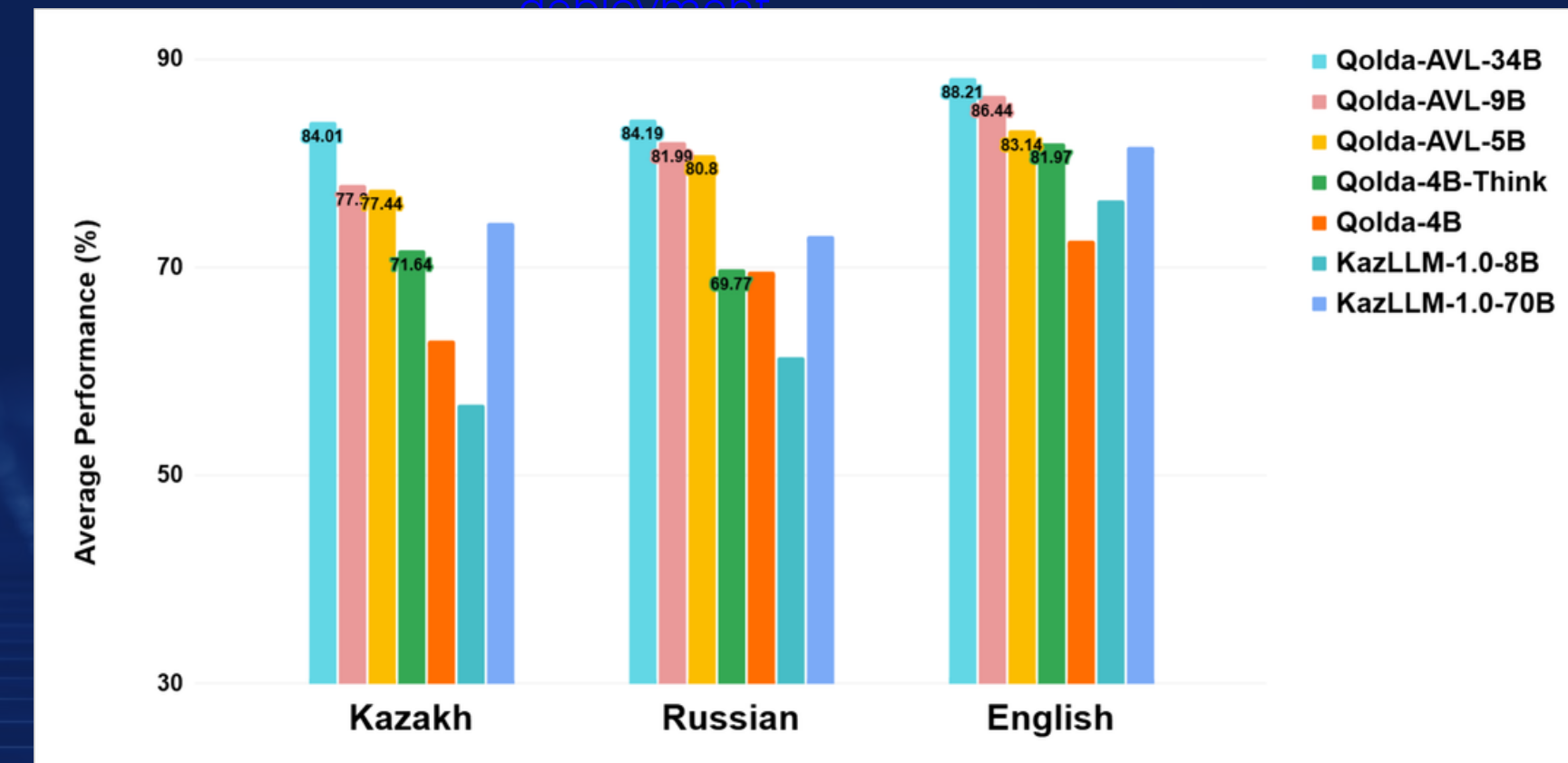
<https://huggingface.co/issai/Qolda>
[https://github.com/ISSAI/Qolda-](https://github.com/ISSAI/Qolda-deployment)
[deployment](https://github.com/ISSAI/Qolda-deployment)



3000+
downloads



AI for
Good



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(PTF - BR24993001)



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3000+

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<https://huggingface.co/issai/Qolda>

<https://github.com/IS2AI/Qolda-deployment>

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We are always open for collaboration. Contact us:

issai@nu.edu.kz

issai.nu.edu.kz

Visit us at Nazarbayev University campus in Astana!

issai.kz



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Youtube



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