President of Imam Hussein University:

## Iran targets top five global Al ranking

## AI diplomacy efforts on whole new level



Iran has been making strides in the field of artificial intelligence, with the country's leaders recognizing its potential impact on the global power structure. In an interview with Iran Daily, Mohammad Reza Hasani Ahangar, the president of Imam Hussein University in Tehran and a member of Iran's National Steering Council of Artificial Intelligence, sheds light on the country's ambitions, strategies, and unique approach to this groundbreaking technology. As the world grapples with the ethical, social, and economic implications of AI, Iran is positioning itself as a key player, aiming to leverage AI for its national development and influence on the world stage.

IRAN DAILY: What are some capacities of artificial intelligence (AI) that the Islamic Republic of Iran can leverage for optimal governance?

HASANI AHANGAR: Artificial intelligence represents a new frontier in the distribution of international power. The situation today is comparable to that of the Industrial Revolution, but Alis the driving force behind the recent transformation. We will soon witness a new revolution and extraordinary changes in the world, similar to the profound impacts of the Industrial

Revolution. However, the scope of this upcoming revolution is significantly broader. The technological divide has categorized countries into "leaders" and "followers," and this divide is now evident in the realm of AI as well.

While the Industrial Revolution introduced complex, orderly environments, AI deals with complex, chaotic, and highly unpredictable environments. The serious challenges posed by the latter environment necessitate that rulers approach problem-solv-

ing with knowledge of AI and its technologies.

Fortunately, in the Islamic Republic of Iran, substantial capacities have been utilized so far, driven by the continuous demand from the Leader of Iran's Revolution Ayatollah Seyyed Ali Khamenei in the fields of AI and cognitive sciences, particularly over the past 12 years. These capacities are noteworthy in several areas:

1. Human capital development: There has been a focused effort by Iranian universities and scientific centers to expand disciplines that foster the training of specialized human capital in AI.

2. Establishment of laboratories: Numerous laboratories dedicated to AI have been created within our scientific centers and universities. This means our substantial human capital in universities has the environment to demonstrate knowledge, validate it, translate it into technology, and shape the AI ecosystem.

3. Infrastructure mechanisms: Various mechanisms have been designed that can have a significant impact from an infrastruc-

tural perspective.

These three capacities collectively expedite the formation of the AI ecosystem. We believe that the positive strides made in the country over the past decade have brightened the future. The vision for this domain, shaped by the strategies proposed by the Leader, has driven the governance to aim for Iran to be among the top ten countries globally in this field. This means being a leading country, capable of utilizing these capacities to achieve the set objectives.

What specific strategies does the Leader of Iran's Revolution emphasize regarding artificial intelligence?

The Leader believes that while significant and commendable efforts have been made in the field of artificial intelligence in Iran, they are not sufficient. He emphasizes the need for "speed of action" and expects progress in this area to accelerate. This urgency is twofold:

one in relation to the Islamic Republic's own capacity and the other in relation to the advancements of other countries. Success in this field requires a comprehensive and precise understanding of AI — both at a strategic level and with awareness of the plans and strategies of competitors, including their short-term and long-term agendas.

Is there currently a formal document on artificial intelligence approved in the country?

At present, several documents have been drafted by various institutions. The Ministry of Communications and the National Center for Cyberspace have prepared a document, and the Minister of Communications has promised its final presentation. Additionally, the Council

of the Cultural Revolution has developed a document, and the Center for Artificial Intelligence, operating under the Council for Artificial Intelligence, is also working on one.

Each of these documents approaches the topic from a specific angle. Therefore, a comprehensive roadmap for the AI ecosystem is necessary. We face a chain of issues, not just those related to knowledge

and scientific production. The ecosystem encompasses everything from the initial idea to knowledge creation, transforming knowledge into technology, converting technology into products, and commercializing those products. Only after these stages can society truly perceive how AI accelerates their activities. Thus, the AI ecosystem requires a comprehensive roadmap.



A homegrown robotic arm that will be used in medicine is unveiled in a ceremony in Tehran, Iran, on June 16, 2021.

What do you think is the current major challenge for the Islamic Republic in achieving its AI goals?

Although we have developed numerous strategic maps and documents, I believe we face a significant challenge: institutional mapping. Institutional mapping means creating a national and international division of labor in

AI. It needs to be precisely determined which institutions and universities will play roles in advancing and solving various AI-related issues. This division of labor must be done in a way that fosters synergy and coherence. Alongside drafting national documents, institutional divisions of labor are essential to help achieve the goals set in these documents.

Can mastering AI significantly empower any country that excels in it on the international stage?

AI must be considered in two dimensions. Currently, the technical and engineering aspects of AI receive the most attention, but I believe the core of AI lies in the philosophy of mind. This involves designing a governance system that utilizes AI, and I believe this

area, despite its importance, receives less attention. Yet, the main power struggle among the world's political powers centers on this domain, and the distribution of international power stems from it, rather than from the technical and engineering fields. The technical and engineering aspects are powerful tools for rulers who prioritize the philosophy of mind and cognitive sciences.

How does Iran's approach to artificial intelligence differ from prevalent global approaches?

The difference lies in the guiding principles. For the Islamic Republic, these guiding principles are crucial. For instance, the human and ethical issues of AI are significant topics that the West pays less attention to. A comprehensive document to be drafted will certainly dedicate a section to these issues, deriving its chapters from Islamic principles and the thoughts of the leaders of Iran's Islamic Revolution. This is perhaps the most important distinguishing feature of the document that Iran will draft compared to other AI documents worldwide.

In our comprehensive roadmap for the AI ecosystem, we consider topics such as knowledge and research domains, scientometrics and algorithm standardization, legal infrastructure design, technologies and innovations, products, hardware infrastructure, the expansion of laboratories, platforms and applications, social networks, and language models. These are crucial for intelligent governance, especially in economics, commerce, health, and education. Addressing these topics requires a correct philosophical view of AI.

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