

## FOREWORD – Gov. Michael Dukakis

Around the world, the growth of digital services is accelerating. Schools, businesses, government agencies, and hospitals are all moving online. Behind these digital connections are powerful computer systems that promote efficiency and economic growth, but also pose new challenges, particularly for democratic governments. Should AI systems determine criminal sentences? Should they decide who gets a job or is allowed to cross a national border? Should AI systems grade final exams? And how will we know if these systems make the right decisions?

These are real challenges that confront governments today. AI systems are also becoming more complex. In the early days, when people spoke of “artificial intelligence” they often meant expert systems that had turned a skill, such as a medical diagnosis, into a series of decisions. That process could be automated and provided the non-expert with the insights of the trained diagnostician. And if further research provided a better decision, it was relatively easy to modify the system to take account of new insights.

Today AI systems rely on very large data sets and processes that constantly modify outcomes based on elaborate testing that is not easy to replicate. Machine learning, deep learning, and neural networks are all part of a new generation of AI research. The advances in Artificial Intelligence over the last few decades have been remarkable. From image recognition and voice recognition, to self-driving vehicles, prose composition, and general-purpose programs that have defeated world champions in both chess and go.

In Massachusetts, we have long worked to promote technological innovations while also confronting the social and policy implications of our creations. Our state is home to many great universities and companies that advance the sciences and pioneer the future. But Boston and Cambridge are also leading efforts to limit the use of facial recognition, a particular AI technique that makes possible mass surveillance. And the Massachusetts Assembly is preparing legislation to establish a commission of experts to study the use of AI in agency decision-making on matters from criminal justice to child welfare. The Massachusetts AI commission would assess transparency and fairness, and help agencies validate and test the automated systems they use.

## *The AI Social Contract Index 2020*

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Many governments recognize the need to develop policies for artificial intelligence. Angel Gurría, the Secretary General of the OECD, has worked closely with OECD countries, and non-member countries, particularly in the global south, to establish an international framework that emphasizes human-centric AI, inclusive growth, sustainable development, and well-being. Former Prime Minister Shinzo Abe, joined with Secretary Gurría, to gather support for the AI Principles at the G20 summit last year in Osaka, another milestone in the development of global policy for AI.

Civil society organizations and experts in computer science have urged the OECD and countries to go further. Their proposed “Universal Guidelines for AI” examine such hard problems as the social scoring system in China that assigns numeric scores to each person based on their allegiance to the government. They have called for red lines that ban such practices. The Universal Guidelines also make clear that those who deploy AI systems should carry the responsibility for the consequences. If it is not possible to maintain control of an AI system, it may be necessary to pull the plug.

And the Boston Global Forum, working with the World Leadership Alliance, has set out the **Social Contract for Age of AI**. While TCP / IP is the platform for communication among internet users, the Social Contract for AI lays the foundation for a new international system; it focuses on the conduct of each nation, relations with non-state actors, and the interconnection of nations on a worldwide basis. The Social Contract for the Age of AI builds on the foundation of democratic governments, that members of a society should cooperate for social benefits and that this understanding should be expressed clearly in legal rules and political institutions that are accountable to the people.

The OECD should make sure that countries that have signed up for the OECD AI Principles implement the OECD AI Principles. The United Nations could pursue a global agreement so that AI is used only for constructive purposes, even as the European Union and the Council of Europe establish new legal frameworks for AI. Civil society and technology experts have a vital role in public discussions, ensuring that government maximize the social benefits and minimize the political and economic risks of AI.

## *Artificial Intelligence and Democratic Values*

We must also recognize that these choices about AI carry real consequences for the rights and freedoms of citizens. We already see how authoritarian governments can use AI techniques to monitor social protest through facial recognition and analysis of communications and travel records. And once these systems are established, they will be difficult to dismantle. World leaders will need to speak clearly about the need to protect democratic values even as they promote this new technology.

This work is therefore vitally important for our societies and for democracies around the world. But we will need a way to measure progress, to close the gap between principles and practices. And that is the significance of this impressive report – *Artificial Intelligence and Democratic Values: The AI Social Contract Index*. The *AI Index* sets out the first methodology to evaluate and rank the AI policies of national governments. Grounded in international norms, such as the OECD AI Principles and the Universal Declaration for Human Rights, the AI Index urges countries to make good on their commitments. The AI Index provides a basis to measure progress over time.

I thank Marc Rotenberg and the extraordinary team at the **Center for AI and Digital Policy** that put together this landmark report. The Center for AI is the newest project of the Michael Dukakis Institute. In my many years in government, this report on *Artificial Intelligence and Democratic Values* is one of the most comprehensive and thoughtful reports I have read. I also thank the young researchers who worked on this project. One of the goals of the **Michael Dukakis Institute** is to train new leaders in the field of technology and policy. I am glad we provided this opportunity for them.

I also thank Tuan Nguyen who has worked closely with me at the Michael Dukakis Institute, developed our proposals on AI policy, organized the meetings of the **Boston Global Forum**, established the **AI World Society**, and prepared the **Social Contract for the Age of AI**. I also thank my colleagues at the Boston Global Forum, my friends at the **Club de Madrid**, and the **UN Academic Impact**, for their collaborations on this important work.

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*The AI Social Contract Index 2020*

Artificial Intelligence can help humans govern, but AI can't replace human decision-makers. We must promote a world in which AI provides broad social benefit for all, a world that also safeguards fundamental rights and strengthens democratic institutions.

The Michal Dukakis Institute, the World Leadership Alliance, the UN Academic Impact will join together with others to seek commitments from national government for the Social Contract for the Age of AI and the forthcoming Democratic Alliance on Digital Governance. *The AI Social Contract Index* will measure our success toward our shared goals. I look forward to future editions.

Michael Dukakis, Chair  
Boston Global Forum  
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