What We Have Done, in the Past Three Years

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Shanghai Institute for Science of Science

Contents:

- **Global AI Governance**

- **China's AI Governance**

Artificial Intelligence For Assessment | Interim Meeting
May 2023

01 On global AI governance

AI Governance: What to Govern, Who Governs, and How to Govern?

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Possible Subtitle

AI GOVERNANCE IN 2019 - A YEAR IN REVIEW

AI GOVERNANCE IN 2019
A YEAR IN REVIEW
OBSERVATIONS OF 50 GLOBAL EXPERTS

April, 2020
Shanghai Institute for Science of Science
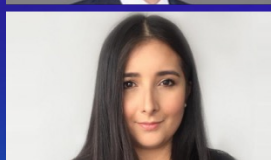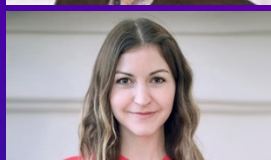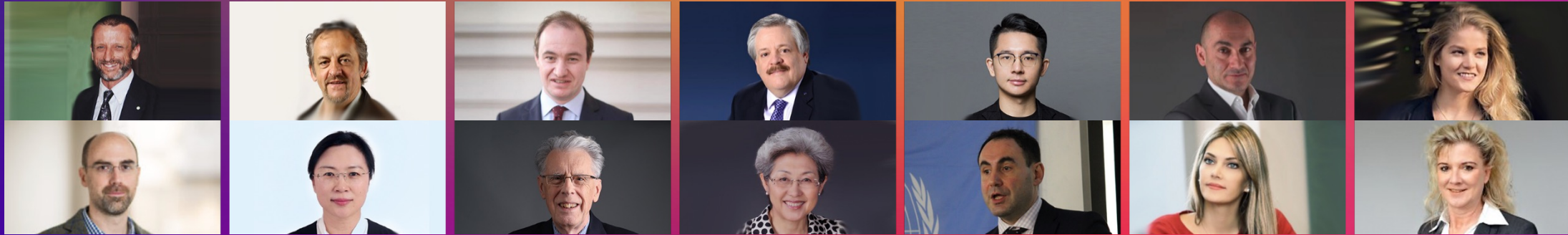

2019全球人工智能治理
年度观察
来自全球50位专家的观点

2020年8月
上海市科学学研究所

- **Shanghai Institute for Science of Science organizes authors from various fields worldwide to publish a series of reports titled *AI GOVERNANCE - A YEAR IN REVIEW*.**
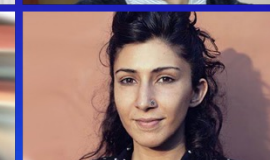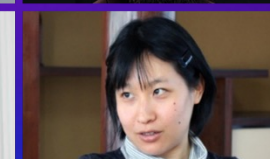
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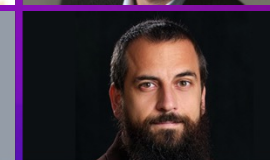Possible Subtitle

AI GOVERNANCE IN 2020 - A YEAR IN REVIEW

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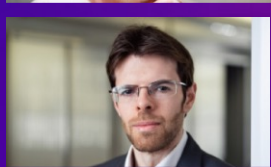# AI GOVERNANCE IN 2019 A YEAR IN REVIEW

OBSERVATIONS OF 50 GLOBAL EXPERTS

April, 2020

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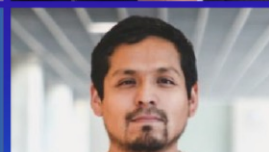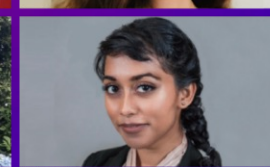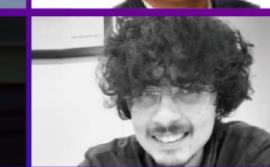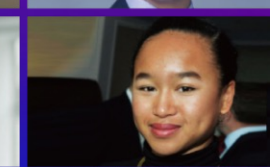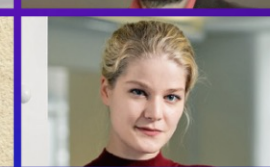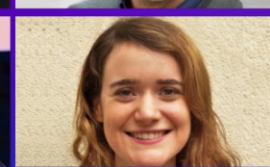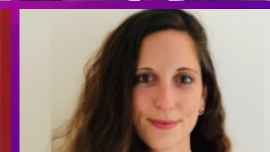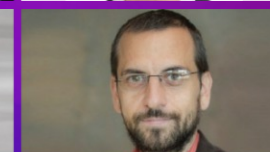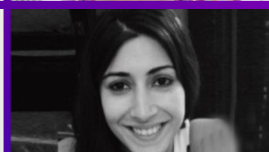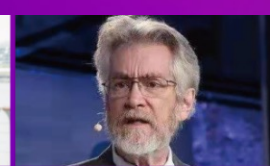
June, 2021

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Possible Subtitle

A GLOBAL PERSPECTIVE OF AI GOVERNANCE

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1. ON GLOBAL AI GOVERNANCE

1.1 OVER 60 AUTHORS FROM AROUND THE WORLD CONTRIBUTED TO THIS BOOK

Authors	Title
John E. Hopcroft	Turing Award winner and professor at Cornell University in the United States
Stuart Russell	professor at the University of California, Berkeley in the United States and author of Artificial Intelligence: A Modern Approach, a textbook used by more than 1,300 universities in 116 countries
Fu Ying	former Vice Minister of the Ministry of Foreign Affairs of China and Director of the Center for International Security and Strategy of Tsinghua University, who advocates "working together for win-win outcomes" in the field of global AI
Eugenio V. Garcia	Senior Advisor at the Office of the President of the United Nations General Assembly who urges developing countries to actively voice their opinions

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who introduce the most important issues and new explorations in their respective regions

who introduce the latest technological solutions for governing AI

who share efforts to coordinate governance systems for AI among countries and attempt to reach consensus

who explore the theoretical foundations behind governance systems for AI

who provide the latest corporate governance systems from the perspective of enterprise practice

Pie chart segments:
- policy makers from around the world
- technical experts in the field of AI
- scholars in the humanities and social sciences
- industry experts most closely related to the implementation of AI
- relevant scholars from international organizations

1. ON GLOBAL AI GOVERNANCE

1.2 MULTIDIMENSIONAL PRESENTATION OF CHINA'S EXPLORATION AND PRACTICE

As a great power in AI technology and industry, China needs to showcase its thinking and specific work in governance to the world. This book invites many Chinese experts to introduce China's AI governance from multiple dimensions.

In 2017, the State Council of China issued the New Generation AI Development Plan as a national strategic plan for the development of AI in China before 2030. This plan outlines the basic framework for the development of AI and emphasizes the importance of actively promoting the governance of AI as a key task.

In February 2019, the Ministry of Science and Technology established the New Generation AI Governance Expert Committee composed of relevant experts from universities, research institutes, and enterprises.

In June 2019, the committee issued the New Generation AI Governance Principles - Developing Responsible AI, which proposed eight governance principles: harmony and friendliness, fairness and justice, inclusiveness and sharing, respect for privacy, safety and control, shared responsibility, open cooperation, and agile governance.

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1. ON GLOBAL AI GOVERNANCE

1.3 FORMING A GLOBAL AI GOVERNANCE SYSTEM

In the era represented by the years 2019 and 2020, the global AI governance system is taking shape.

In the technological field	In the humanities and social sciences field	In industry	In many countries and regions	In international organizations
technical means such as federated learning are developing.	evaluation methods for AI governance are being explored.	corporate governance systems for AI are forming.	principles of AI governance are being proposed.	consensus are being built on global agreements on AI governance.

Furthermore, a significant trend is that AI governance is moving from principles to practice amid the anxieties of various parties.

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02 China's AI governance

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2. CHINA'S AI GOVERNANCE

Possible Subtitle

Artificial intelligence serves as the pivotal driving force behind the new technological revolution and industrial transformation, as well as a focal area in international technological competition. In response, the Chinese government has dedicated substantial resources to propel the advancement of AI, including supporting research and development activities in universities and research institutes, as well as technology applications within enterprises.

Q1

Establishment of pilot zones

Q2

Strengthening Governance of Scientific Ethics

Q3

Strengthening Governance of AI Ethics

Q4

Strengthening Algorithm Governance

Q5

Strengthening Governance of ChatGPT

2. CHINA'S AI GOVERNANCE

2.1 ESTABLISHMENT OF PILOT ZONES

China has constructed 18 national AI innovation development pilot zones, conducting trials in policy, technology, and applications within each zone. At present, large-scale social experiments are underway in these zones, attempting to discern the genuine impact of AI by comparing scenarios with and without its implementation.

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2. CHINA'S AI GOVERNANCE

2.2 STRENGTHENING GOVERNANCE OF SCIENTIFIC ETHICS

In 2019, China established the National Science and Technology Ethics Committee, instituting a national-level scientific ethics management organization. The March 2022 release of the Opinions on Strengthening Scientific Ethics Governance laid out China's scientific ethics principles and foundational system, laying the groundwork for implementing ethical governance in science and technology.

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2. CHINA'S AI GOVERNANCE

2.3 STRENGTHENING GOVERNANCE OF AI ETHICS

The National New Generation AI Governance Committee has successively issued:

- ***New Generation AI Governance Principles - Developing Responsible AI***

- ***New Generation AI Ethics Standards***

Laws and regulations:

- ***Data Security Law***

- ***Regulations on the Administration of Algorithm Recommendation of Internet Information Services***

- ***Guiding Opinions on Strengthening the Comprehensive Governance of Internet Information Service Algorithms***

Local legislation:

- ***Shenzhen AI Industry Promotion Regulations***

- ***Shanghai AI Industry Development Promotion Regulations***

2. CHINA'S AI GOVERNANCE

2.4 STRENGTHENING ALGORITHM GOVERNANCE

Application of algorithms in the Internet field:

- ***recommendation algorithms***
- ***automated decision-making algorithms***
- ***deep synthesis algorithms.***

Algorithmic recommendations:

- ***Regulations on Ecological Governance of Network*** Information proposes sound mechanisms for manual intervention and user self-selection with regards to algorithmic recommendation technology.

- ***Regulations on the Administration of Algorithm Recommendation of Internet Information Services,*** which took effect on March 1, 2022, is China's first legislation focusing on algorithm governance. It puts forward a series of regulatory measures, such as algorithm security risk monitoring, algorithm security assessment, and algorithm filing management. Industry insiders see this as a landmark, dubbing 2022 the "year of algorithm regulation".

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Pos **2.5 STRENGTHENING GOVERNANCE OF CHATGPT**

With the popularity of ChatGPT around the world, the Chinese government has become aware of the social issues that generative AI may bring. To promote the healthy development and regulated application of generative artificial intelligence technology, in April of this year, the Cyberspace Administration of China drafted *the Management Measures for Generative Artificial Intelligence Services (Draft for Soliciting Opinions).* The draft makes it clear that content generated by generative artificial intelligence should be true and accurate, and measures should be taken to prevent false information. Industry insiders believe that the release of the draft marks the entry of China's generative artificial intelligence into a regulated development stage.

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PART 3. INSIGHTS FROM MULTI-STAKEHOLDER WORKSHOPS

INSIGHTS FROM MULTI-STAKEHOLDER WORKSHOPS (I)

From existing to desired systems

- **Safe Space gamification workshop done in cooperation with JGU designed to study how Chinese participants (players) would create better systems from their <u>cultural point of view</u>**, by letting them play a situation that informs this improvement of AI systems ('unemployment game'). The participants were Chinese students living provisionally in Ireland.

- After certain rounds of simulation **"players" could submit suggestions for altering the system based on their experience and vote under a democratic manner for one of the submissions.**

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INSIGHTS FROM MULTI-STAKEHOLDER WORKSHOPS (II)

From existing to desired systems

The changes approved equalled the benefits for those **living in rich or poor areas**, for **gender** and **for household composition** (making no difference for single families or for parents).

Attributes	Initial profile	Final profile
Gender		
Male	1	1
Female	0	1
Household composition		
Single	1	1
Parent	0	1
Ethnicity		
White	1	1
Ethnic minority	0	0
Interpersonal skills		
High	1	1
Low	0	0
Vulnerability		
No	1	1
Yes	0	0
Place of residence		
Rich area	1	1
Poor area	0	1
Trainning (min 10 units)		
Yes	1	1
No	0	0
Social network		
Yes	1	1
No	0	0
Total	8	10

From existing to desired systems

- The **safe space was evaluated** by the participants, who stressed on the serenity, tranquillity, and peacefulness provided by the natural environment of venue. "High engagement" and "social networking" were remarked regarding the organisational aspect of "People, Team".

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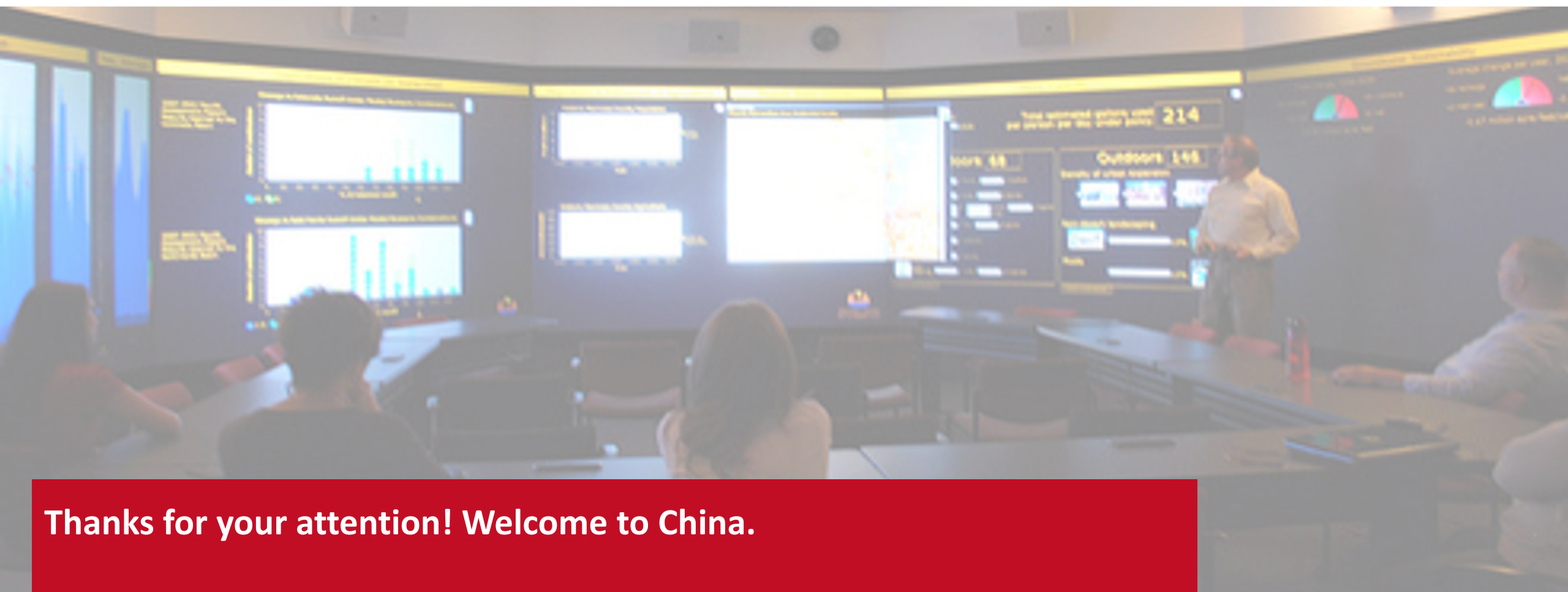
Thanks for your attention! Welcome to China.