UNIVERSITY OF Southampton
School of Electronics and Computer Science

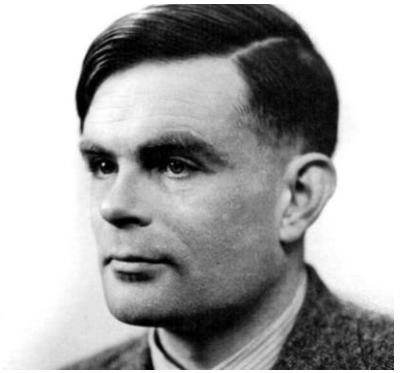
Governing AI for Humanity

FST Meeting

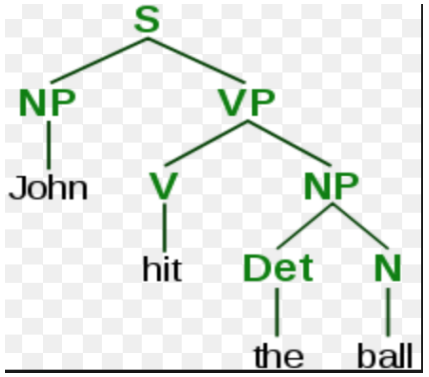
Professor Dame Wendy Hall

January 2025

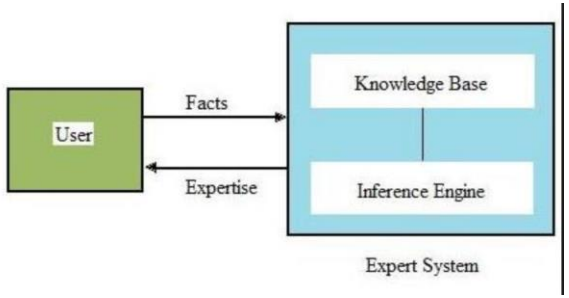
A brief history of AI



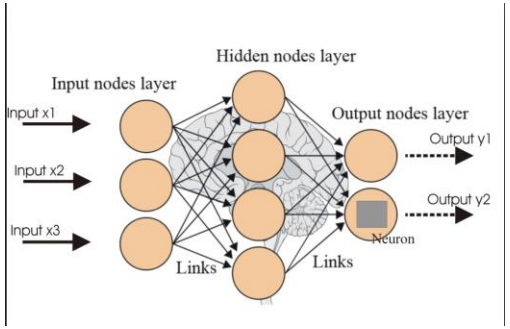
1950’s



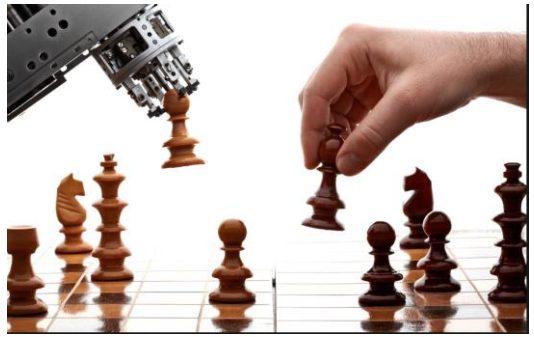
1960’s



1970-80’s



1980’s-90’s



1990’s-2000’s

The Future

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Independent report

Growing the artificial intelligence industry in the UK

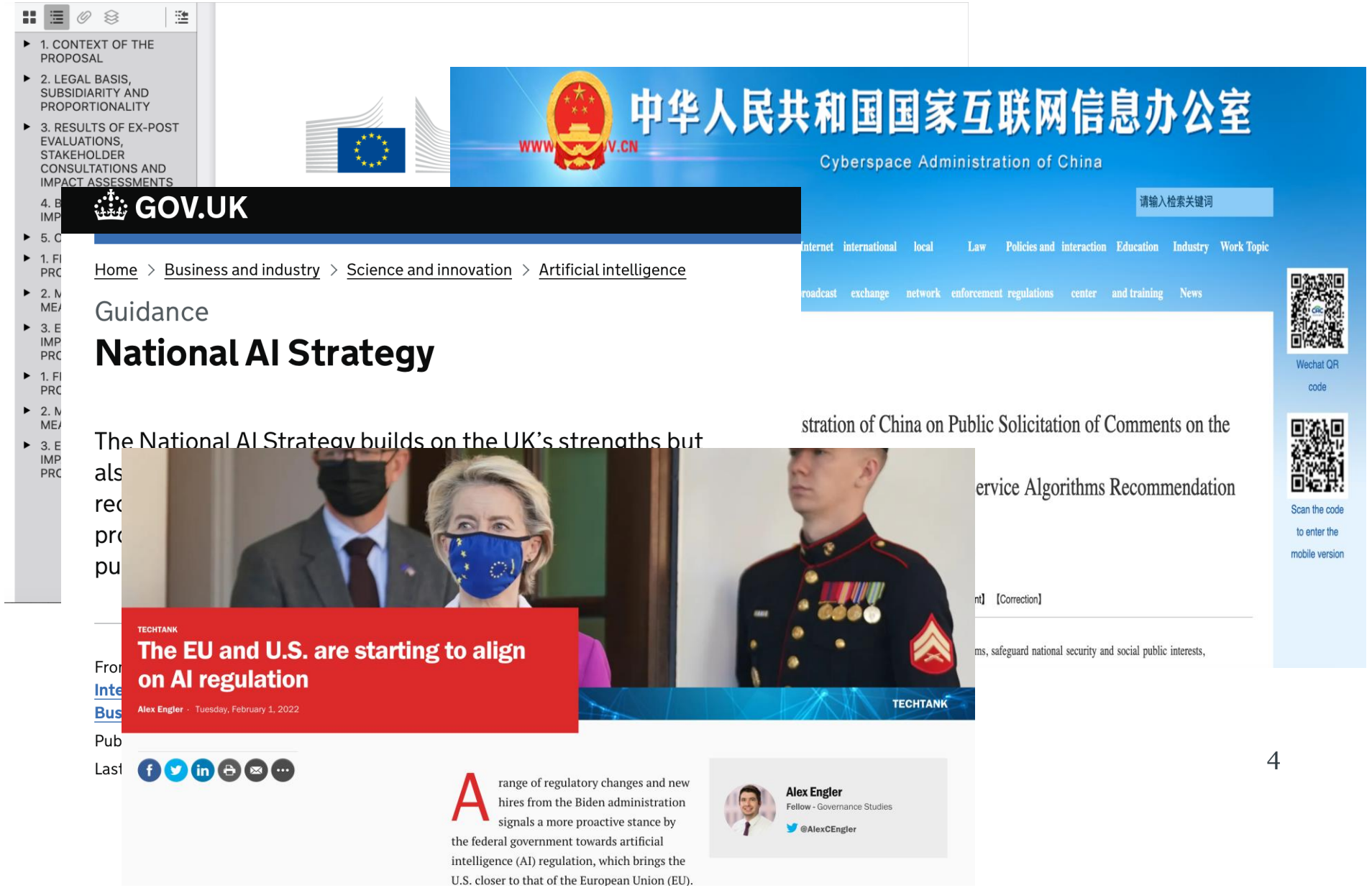
From: Department for Digital, Culture, Media & Sport and Department for Business, Energy & Industrial Strategy
Part of: Industrial strategy and UK and the Commonwealth
Published: 15 October 2017

This independent review, carried out by Professor Dame Wendy Hall and Jérôme Pesenti reports on how the Artificial Intelligence industry can be grown in the UK.

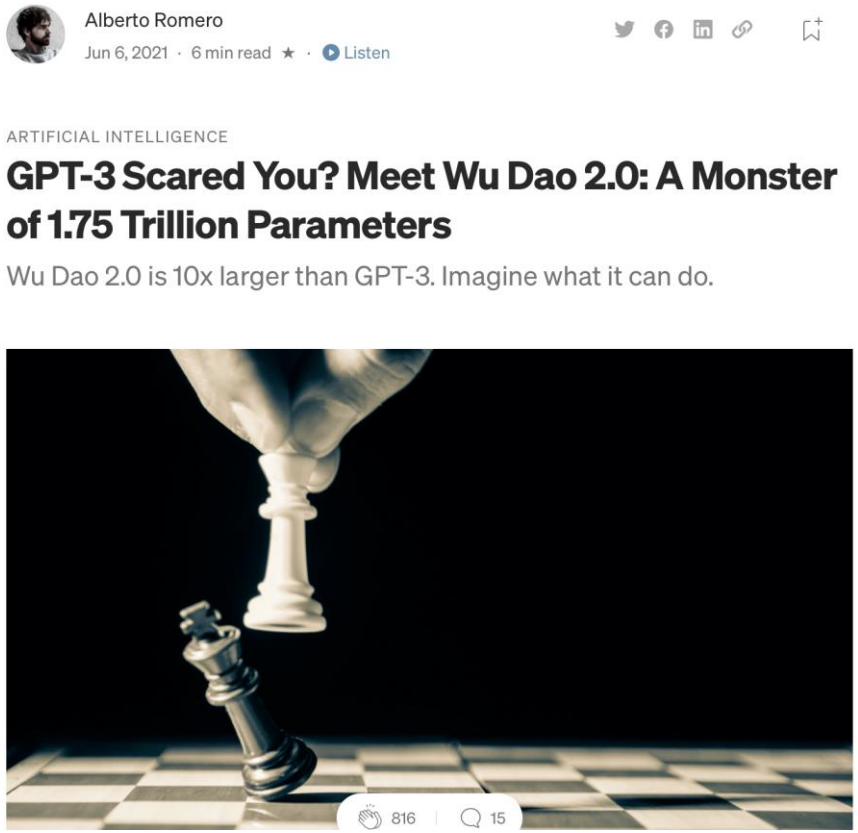
UK government announces £1 billion AI Sector Deal

The government is pledging £300 million in new spending as part of its wider AI investment drive

AI regulation as part of national strategies



The rise of the large language model



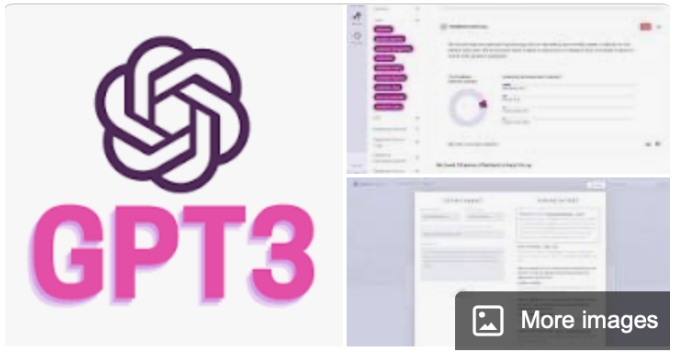
Alberto Romero
Jun 6, 2021 · 6 min read ★ · Listen

ARTIFICIAL INTELLIGENCE

GPT-3 Scared You? Meet Wu Dao 2.0: A Monster of 1.75 Trillion Parameters

Wu Dao 2.0 is 10x larger than GPT-3. Imagine what it can do.

816 15



GPT-3

Generative Pre-trained Transformer 3 is an autoregressive language model that uses deep learning to produce human-like text. It is the third-generation language prediction model in the GPT-n series created by OpenAI, a San Francisco-based artificial intelligence research laboratory. Wikipedia

Original author(s): OpenAI

Release date

GPT-3, released in **May 2020**, has 175 billion parameters. The third generation in the GPT-n series uses deep learning to produce human-like text.

21 Apr 2022

Department for Science, Innovation & Technology

Office for Artificial Intelligence

Policy paper

A pro-innovation approach to AI regulation

Published 29 March 2023

Contents

Ministerial foreword
Executive summary
Part 1: Introduction
Part 2: The current regulatory environment
Part 3: An innovative and iterative approach

Presented to Parliament by the Secretary of State for Science, Innovation and Technology by Command of His Majesty on 29 March 2023.

Command Paper Number: 815

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ISBN: 978-1-5286-4009-1

Center for AI Safety

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Statement

Signatories

Sign the statement

Mitigating the risk of extinction from AI should be a global priority alongside other societal-scale risks such as pandemics and nuclear war.

Signatories:

AI Scientists | Other Notable Figures

Geoffrey Hinton
Emeritus Professor of Computer Science, University of Toronto

Yoshua Bengio
Professor of Computer Science, U. Montreal / Mila

Demis Hassabis
CEO, Google DeepMind

Sam Altman
CEO, OpenAI

Dario Amodei
CEO, Anthropic

AI poses existential threat and risk to health of millions, experts warn

BMJ Global Health article calls for halt to 'development of self-improving artificial general intelligence' until regulation in place

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AI 'godfather' Geoffrey Hinton warns of dangers as he quits Google

2 May · Comments

MIT Technology Review

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ARTIFICIAL INTELLIGENCE

How existential risk became the biggest meme in AI

"Ghost stories are contagious."

By Will Douglas Heaven | June 19, 2023

- Bvhm

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Home > Business and industry > Science and innovation > Artificial intelligence

Press release

UK to host first global summit on Artificial Intelligence

As the world grapples with the challenges and opportunities presented by the rapid advancement of Artificial Intelligence, the UK will host the first major global summit on AI safety.

From: Prime Minister's Office, 10 Downing Street and The Rt Hon Rishi Sunak MP
Published 7 June 2023

News > UK > UK Politics

AI could 'kill many humans' within two years, warns Sunak adviser

Stark warning comes as Rishi Sunak prepares to persuade Joe Biden of 'grand plan' to control artificial intelligence

Adam Forrest Political Correspondent, Kate Devlin • Tuesday 06 June 2023 17:06
• 88 Comments

Tech entrepreneur Ian Hogarth to lead UK's AI Foundation Model Taskforce

Artificial intelligence expert announced as chair of government's Foundation Model Taskforce.

18th June 2023

China / Diplomacy

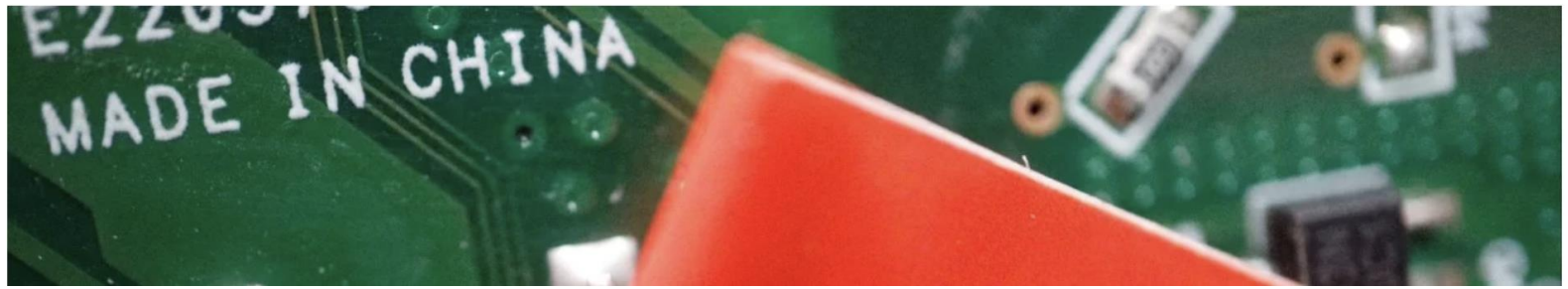
Belt and road forum: China launches AI framework, urging equal rights and opportunities for all nations

- The Global AI Governance Initiative was announced a day after the latest US ban seeking to restrict China's access to advanced chips and chipmaking tools
- China says it opposes countries using AI tech for 'manipulating public opinion, spreading disinformation, intervening in other countries' internal affairs'

Dewey Sim + FOLLOW

Published: 4:25pm, 18 Oct, 2023

Why you can trust SCMP

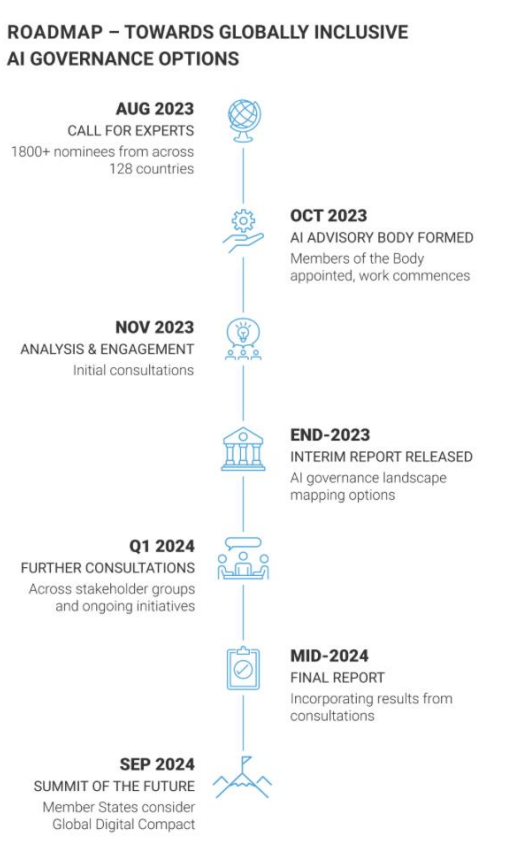


United Nations | AI Advisory Body

High-level Advisory Body on Artificial Intelligence

- **The Global AI Imperative**
  Globally coordinated AI governance is the only way to harness AI for humanity, while addressing its risks and uncertainties, as AI-related applications, algorithms, computing capacity and expertise become more widespread internationally.

- **The UN's Response**
  To foster a globally inclusive approach, the UN Secretary-General is convening a multi-stakeholder High-level Advisory Body on AI to undertake analysis and advance recommendations for the international governance of AI.



Artificial intelligence (AI)

Sunak announces UK AI safety institute but declines to support moratorium

PM says institute will test new types of AI for range of risks but says pause in developing powerful models is not feasible

UK politics live – latest updates

Dan Milmo *Global technology editor*

Thu 26 Oct 2023 08.10 EDT

Rishi Sunak sai misinformation, t

Rishi Sunak h has declined t technology.

THE WHITE HOUSE

Administration Priorities The Record Briefing Room

OCTOBER 30, 2023

FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence

BRIEFING ROOM › STATEMENTS AND RELEASES

Today, President Biden is issuing a landmark Executive Order to ensure that America leads the way in seizing the promise and managing the risks of artificial intelligence (AI). The Executive Order establishes new standards for AI safety and security, protects Americans' privacy, advances equity and civil rights, stands up for consumers and workers, promotes innovation and competition, advances American leadership around the world, and more.

As part of the Biden-Harris Administration's comprehensive strategy for responsible innovation, the Executive Order builds on previous actions the President has taken, including work that led to voluntary commitments from 15 leading companies to drive safe, secure, and trustworthy development of AI.

United Nations AI Advisory Body

UN Secretary-General's High-level Advisory Body on Artificial Intelligence Releases Proposals for Global Governance of AI

New York, NY, September 19, 2024 – The United Nations Secretary-General's High-level Advisory Body on Artificial Intelligence (HLAB-AI) released its final report "Governing AI for Humanity" today. It builds on months of extensive global consultations and the publication of an interim report in December 2023. The uniquely diverse Advisory Body is the world's first and most representative expert group capable of reflecting humanity's aspirations for AI.