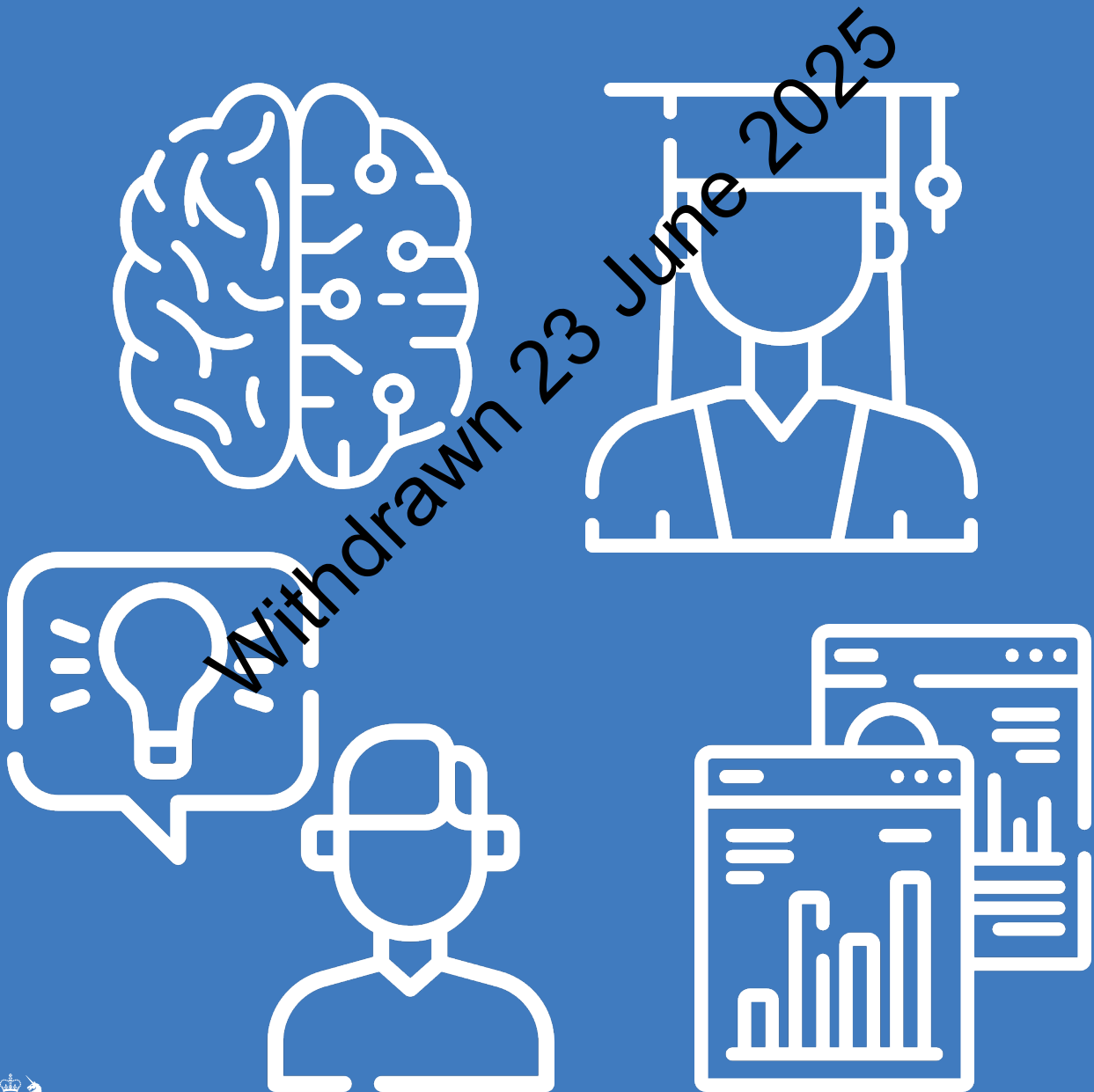# AI Sector Deal

One Year On

Office for
Artificial
Intelligence

INDUSTRIAL
STRATEGY

Withdrawn 23 June 2025

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Withdrawn 23 June 2025

Background

Artificial intelligence (AI) and machine learning are already transforming the global economy, using vast datasets to perform complex tasks. These range from helping doctors diagnose medical conditions such as cancer more effectively to allow people to communicate across the globe using speech recognition and translation software.

The AI Sector Deal – a £1 billion package of support from government and industry - is boosting the UK's global position as a leader in developing AI and related technologies. It is taking tangible actions to advance the [Industrial Strategy's AI and Data Grand Challenge](#) and ensure the UK is the leading destination for AI innovation and investment.

Where are we today?

One year after the publication of the [AI Sector Deal](#) in April 2018 last year, government and industry have already seen significant progress.

The actions to date have been focusing on building the skills, talent and leadership in the UK, promoting adoption across sectors, and ensuring AI and related technologies are used safely and ethically.

There have been important achievements across the Industrial Strategy's five foundations of productivity.

The UK's potential in AI

Add **£232Bn** to the UK economy by 2030

Boost productivity in some industries by **30%**

Generate savings of up to **25%**

> *"Since the publication of the Sector Deal, the momentum has continued and we have seen a raft of major announcements to promote the positive use of AI all across the UK."*

Digital Secretary Jeremy Wright

Digital Secretary Jeremy Wright keynote address at the CogX Festival in June 2019

Photo Credit: Splento

AI SECTOR DEAL ACHIEVEMENTS

BUSINESS ENVIRONMENT
We established the AI Council, with Tabitha Goldstaub as the AI Council Chair and Business Champion; Dame Wendy Hall as the Skills Champion; and Demis Hassabis as the Advisor to the Office for AI.

PEOPLE
To develop the right skills for the jobs of the future and to create the environment for AI development and deployment, we announced:
*   16 New Centres for Doctoral Training at universities across the country, delivering 1,000 new PhDs over the next 5 years;
*   New prestigious AI Turing Fellowships to attract and retain the top AI talent;
*   Industry-funding for new AI Masters places; and
*   2,500 places for AI and data conversion courses starting next year. This includes up to 1,000 government-funded scholarships.

INFRASTRUCTURE
To facilitate legal, fair, ethical and safe data sharing that is scalable and portable to stimulate AI technology innovation:
*   Partnered with the Open Data Institute and Innovate on three 'Data Trusts' pilots, tackling illegal wildlife trade, reducing food waste, and improving public services in the Royal Borough of Greenwich, London.

PLACE
To work closely with key clusters to provide the support needed for AI businesses to thrive:
*   Commissioned GDS to deliver the Review of AI adoption in the and published an *'AI Guide for Government'*;
*   Funded up to £50 million for five new centres of excellence for digital pathology and imaging, including radiology, using AI medical advances; and
*   Funded £30 million for the new Bayes Centre in Edinburgh, a world-leading centre of data science and AI.

IDEAS
To support the adoption of AI across the public and private sectors we have:
*   Supported the development and delivery of the Early Diagnosis Mission - which is to use data, AI and innovation to transform prevention, early diagnosis and treatment of chronic diseases.
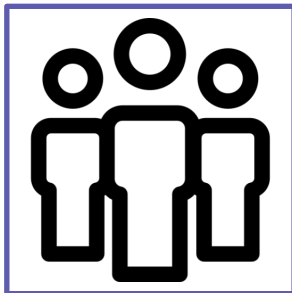In addition, we are committing to work with the private sector to boost research and development. We have:
*   Funded £3 million for three new research projects to investigate how businesses can make best use of AI in insurance and law as well as analysing consumer attitudes to AI;
*   Funded up to £79 million for three new AI programmes to transform engineering, urban planning and healthcare;
*   Funded £600,000 funding for UK-Korea Health Sciences collaboration on Dementia research;
*   Funded 40 AI and data analytics projects, backed by £13 million in government investments, announced to boost productivity and improve customer service; and
*   £50 million to the Derry City and Strabane Region City Deal, this will include development of a new research and design facility, The Centre for Industrial Digitisation, Robotics and Automation.

Business Environment

To create a business environment that secures the UK's position as the best place to start and grow an AI business, we have strengthened the UK's leadership role to keep us at the forefront of the AI and data revolution.

The AI Council has been formed to strengthen the conversation between academia, industry and the public sector with Tabitha Goldstaub as the AI Council Chair and Dame Wendy Hall as the Skills Champion for AI.

The Office for Artificial Intelligence was created to take responsibility for overseeing the AI and Data Grand Challenge and delivering the commitments as set out in the AI Sector Deal.

The Centre for Data Ethics and Innovation was also established to provide independent, expert advice on the measures needed to enable and ensure safe, ethical and innovative uses of AI and data-driven technologies.

AI ecosystem in the UK

- Venture capital investment into the UK's AI sector has risen almost sixfold over the last 5 years. In 2018, AI companies raised nearly double the amount of France and Germany combined (TechNation, 2019)

- The UK has a world leading AI ecosystem, home to a third of Europe's total AI companies and twice as many as any other European country (MMC Ventures, 2019)

- The UK ranked joint first globally in 2017 on the Open Data Barometer, a measure of how governments are publishing and using open data for accountability, innovation and social impact (Open Data Barometer, 2018)

Infrastructure

To ensure the UK has the right digital infrastructure to support a thriving AI and data-driven economy, the Sector Deal commits to tackling the practical and cultural barriers to sharing both publicly and privately held data.

As part of this we, along with Innovate UK, partnered with the Open Data Institute (ODI) to **explore a type of data sharing framework called a data trust** - a legal structure that provides independent stewardship of data.

The ODI worked with three pilot projects, each examining whether a data trust could increase access to data while retaining trust. **These pilots focused on diverse challenges: tackling illegal wildlife trade, reducing food waste, and improving public services in Greenwich**. The findings and recommendations of these pilots were published in April 2019.

The work found a huge demand from private, public and third sector organisations to explore data trusts and other data stewardship models to unblock data sharing. The research focused on the first stages of the data trust life-cycle; scoping and co-design. It found a number of different potential benefits that the data trust approach to data sharing could help to bring. These included:

• helping to balance conflicting views and incentives about how data should be shared and who can access it;

reducing costs and skills needed to steward and share data; and

• making control more representative over how data is used and shared and ensuring data's benefits are distributed more widely, ethically and equitably.

The Data Trust Pilots

Reducing food waste

It is estimated each year 100,000 tonnes of food from retailers and food manufacturers - equating to 250 million meals - is edible and readily available but goes uneaten in the UK.

We worked with WRAP and leading food and drink businesses to investigate if a data trust can improve the ability of organisations to track and measure food waste.

This collaboration supported global food waste reduction efforts and delivery of the UN's Sustainable Development Goal. It would also help reduce greenhouse gas emissions and water usage.

This is exciting, innovative work, where the ODI worked in the open with a wide range of interested organisations to design something that is ethical, fair and innovative.
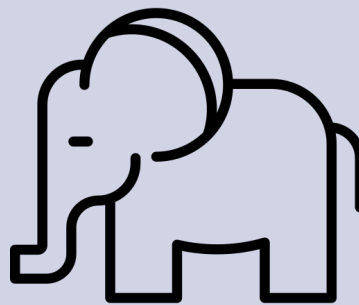
Tackling illegal wildlife trade

In partnership with the WILDLABS Tech Hub and conservation charities, we investigated if a data trust can help make wildlife data from across the globe more accessible, to help us tackle the illegal wildlife trade.

This is ranked as the fourth most lucrative transnational crime after drugs, weapons and human trafficking with an estimated annual revenue of up to £17 billion.

Through sharing image data, we trained algorithms that could help border control officers around the world identify illegal animal products from their smartphones.

Audio data was also used to train algorithms to detect sounds, like gunshots, or the noise of illegal fishing vessels, and share real-time alerts with field rangers.

Leaders from business, academia and data privacy organisations have joined an independent expert committee created to help boost growth of AI in the UK, promote its adoption and ethical use in businesses and organisations across the country

THE AI COUNCIL

The AI Council includes members who are already leading the way in the development of AI - from using it to personalise the shopping experience of Ocado orders while predicting demand, detecting fraud and keeping consumers safe, to The Alan Turing Institute building on the great British pioneer's legacy by identifying and overcoming barriers of AI adoption in society, such as skills, consumer trust and ensuring the protection of sensitive data.

Tabitha Goldstaub

AI Council Chair &
AI Business Champion
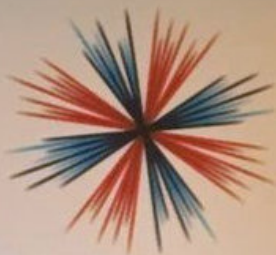
Professor Dame Wendy Hall

Skills Champion for AI

The intention is for the AI Council to cultivate and encourage a much wider representation of experts to focus on specific topics which will initially include, but not limited to, data and ethics, adoption, skills and diversity.

This will allow the broader AI community to work together to drive towards solutions and engage in making the UK a leader in the AI and data revolution.

"Britain is already a leading authority in AI. We are home to some of the world's finest academic institutions, landing record levels of investment to the sector and attracting the best global tech talent, but we must not be complacent.

Through our AI Council we will continue this momentum by leveraging the knowledge of experts from a range of sectors to provide leadership on the best use and adoption of artificial intelligence across the economy."

Business Secretary Greg Clark

THE AI COUNCIL MEMBERS

Professor Adrian Smith
The Alan Turing Institute

Alice Bentinck
Entrepreneur First

Alice Webb
BBC

Ann Cairns
MasterCard

Professor Chris Bishop
Microsoft Research Lab

Dr Claire Craig
Royal Society

Professor David Lane
The Edinburgh Centre for Robotics

Kriti Sharma
AI for good founder

Marc Warner
Faculty

Sir Mark Walport
UKRI

Martin Tisne
Luminate

Mustafa Suleyman
DeepMind

Professor Neil Lawrence
University of Sheffield

Professor Nick Jennings
Imperial College

Dame Patricia Hodgson
Centre for Data Ethics and Innovation Board

Paul Clarke
Ocado

Professor Pete Burnap
Cardiff University

Priya Lakhani
CENTURY Tech

Rachel Dunscombe
NHS Digital Academy

Place

To ensure all four corners of the UK benefit from the opportunities of the AI and data-driven economy we are working with key clusters to fund innovation in AI and related technologies, growing regional opportunities for AI businesses to thrive and benefit the lives of citizens.

This has included an investment of £50 million to launch five new centres of excellence in digital pathology and imaging with AI. These centres – based in Coventry, Glasgow, Leeds, London and Oxford – will put the UK at the forefront of the application of AI and machine learning to digital pathology and imaging, in order to support improved diagnosis and deliver precision treatments.

We announced a further investment of up to £50 million to scale-up this programme and to begin to turn the Centres into a fully national asset and deliver more efficient NHS diagnostic services. Both of these investments supports the [AI and Data Grand Challenge Mission](#) to use AI, data and innovation to transform the prevention, early diagnosis and treatment of chronic diseases by 2030.

In addition to the plans for establishing new centres of excellence, **£30 million of funding was received by the new Bayes Centre in Edinburgh,** a world-leading centre of data science and AI to develop the next applications of AI.
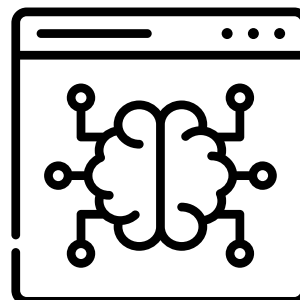
Ideas

AI and data play a crucial role in our ambition to make the UK the world's most innovative economy. This sector deal has seen immediate steps over the last year to support the adoption of AI across the public and private sectors.

We have worked with the AI consultancy, Faculty to conduct a review of AI adoption in the public sector to identify opportunities to increase productivity and service quality through the application of AI and related technologies.

Following the review we **published the AI guide:** *'A guide to using artificial intelligence in the public sector'.*

In 2018, we **funded £3 million for three new research projects to investigate how businesses can make best use of AI in insurance and law** as well as analysing consumer attitudes to AI; and **up to £79 million for three new AI programmes to transform engineering, urban planning and healthcare.**

These achievements are helping us to build the best environment for developing and deploying AI and related technologies in a positive way for people and society.

Photos from social media during London Tech Week

Clockwise from top left. Digital Secretary Jeremy Wright at the Office for AI's CogX booth; The CogX booth before the rush; Universities Minister Chris Skidmore at the Office for AI's AI Summit booth; CogX booth during rush hour

"*I'm delighted to see the recommendations of the review that Jérôme Pesenti and I wrote just over a year ago, coming to life in such a comprehensive set of skills and talent initiatives.*

They provide a great impetus to developing AI skills and talent and I strongly encourage industry, universities and those of you who aspire to be part of putting the UK at the forefront of the AI and data revolution to get involved in these initiatives."

Dame Wendy Hall, Skills Champion for AI

Dame Wendy Hall speech at the AI Skills and Talent launch event, The Alan Turing Institute in February 2019

Photo Credit: Arif Gardner, AG Studios

Withdrawn 23 June 2025

People

Government, academia and industry have been working together to improve the supply of skills to attract and retain the best and most diverse AI talent.

In February 2019, we announced an AI skills and talent package that includes:

- 16 new **centres for doctoral training at universities across the country**, delivering 1,000 new PhDs over the next 5 years;

- new **prestigious Turing AI fellowships** to attract and retain the top AI talent; and

- the first wave of **industry-funding for new AI Masters places.**

Soon after in June, the Prime Minister announced **2,500 places available for the first time for AI and data conversion courses** starting next year, to equip tech-driven businesses and people across the country with the skills they need. This includes **up to 1,000 government-funded scholarships** to open up opportunities for people from all backgrounds.

These are early steps towards building a successful, high-calibre AI workforce that is equipped to harness the opportunities of the AI and data-driven economy, now and in the future.

The founding partners for AI master places

accenture · AMPLYFi · BAE SYSTEMS · Cambridge Consultants · CISCO · CRAY · DeepMind · Infosys · QUANTUMBLACK A MCKINSEY COMPANY · WilmotML · LLOYDS BANK

Delivered in partnership with

institute of CODING · bcs The Chartered Institute for IT

Scaling Up The Ethical Artificial Intelligence MSc Pipeline

We commissioned The British Computer Society, The Chartered Institute for IT, to carry out an independent review into what could be done to boost the number of AI practitioners.

To bridge the skills gap in AI, the review found, more must be done to attract and retain under-represented groups in university computing departments, especially women.

Here are some of the highlights since the publication of the AI Sector Deal

HIGHLIGHTS

***Think the Unthinkable* workshop, which focused on interventions to increase diversity in AI, in collaboration with Tabitha Goldstaub and Dame Wendy Hall**

35+ people attended from across industries including Sue Daley (techUK), Hayaatun Sillem (RAEng), Reena Patel (Nuffield Foundation), Zoë Webster (Innovate UK) and media personality June Sarpong. All attendees had experience of interventions and initiatives geared towards increasing diversity in AI.

*Dame Wendy Hall,
Secretary to the Treasury Robert Jenrick,
Jacqueline de Rojas, President of techUK and
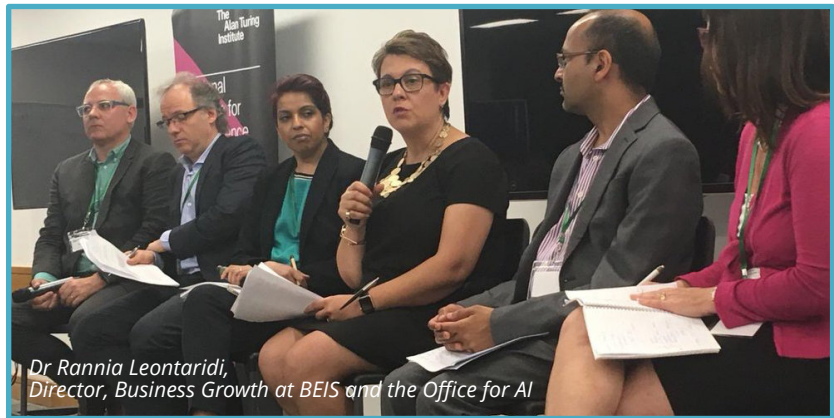Adrian Weller, The Alan Turing Institute*

Photo Credit: Arif Gardner, AG Studios

AI Skills and Talent event attended by Secretary to the Treasury Robert Jenrick

The Office for AI, in collaboration with UKRI and The Alan Turing Institute, announced a new £110 million AI skills and talent package.

Engaging with our International partners

Meeting a high-level delegation from the Italian Government and discussing AI strategies and collaboration opportunities was one of the many highlights we've had with our friends across the globe.

Dr Rannia Leontaridi,
Director, Business Growth at BEIS and the Office for AI

Trilateral CIFAR-UKRI-CNRS workshop at The Alan Turing Institute

Office for AI participated at the workshop which brought together leading researchers from France, Canada and the UK to explore topics around AI and society including online harms.

Photo Credit: Photo Credit: Shutto

"Creating the Office for AI was a wise move by the UK"

H.E. Omar Sultan Al Olama, UAE Minister for AI speaking at CogX.

The Office for AI tested the new *'Guidelines for AI procurement'*, which we are co-developing with the World Economic Forum, at the Annual Meeting of the New Champions in Dalian, China.

Japan UK Technology and Humanity in Education

The Office for AI along with Dr Toshie Takahashi, Professor, Waseda University and Dr Mariarosaria Taddeo, Turing Fellow, The Alan Turing Institute, gave a series of talks to business leaders on Human-Centred Digital Society at the event organised by the Embassy of Japan UK.

Photo Credit: Dr Toshie Takahashi

Promoting UK Artificial Intelligence globally

The Alan Turing Institute, the UK's national institute for data science and AI, signed an agreement with France's DATAIA Institute, a convergence institute dedicated to data science, AI and society and endorsed by Université Paris-Saclay. The agreement will strengthen ties between the UK and France's digital industries and allow for collaborative research in areas of shared interest.

The Institute also initiated agreements to collaborate with three major Japanese research institutes on AI and robotics research. This includes collaboration with AIST (the National Institute of Advanced Industrial Science and Technology), one of the largest research institutes in Japan focusing on bridging the gap between research ideas and commercialisation.

Looking ahead

These achievements are only the start of the UK's plans to be recognised as a place to start and grow an AI business, where AI and data-driven technologies follow the highest ethical standards and the transformative potential of these new technologies is spread across the UK economy more widely.
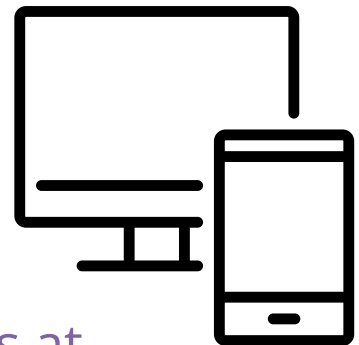
We are already building on our successes to ensure the UK remains at the forefront of the AI and data-driven economy.

By summer 2019, we will have held the first meeting of the AI Council to drive the UK's leadership in AI, continued engaging businesses with the AI and Data Grand Challenge and maximised the ethical uptake of AI technologies across the UK.

The Centre for Data Ethics and Innovation will study the use of data in shaping people's online experiences, and the potential for bias in decision making using algorithms as part of its first large-scale reviews. An interim report on its progress will be published in the summer.

We look forward to seeing the work on data trusts being taken forward following publication of the results of our world-leading data trust pilots run in partnership with the ODI. We are also considering how to use the findings from the review of AI adoption in the public sector to create opportunities to increase productivity and service quality through the application of AI and related technologies.

Sign up to our **newsletter**

Visit us at **gov.uk/officeforai**

Further reading

— **A guide to using artificial intelligence in the public sector, GDS and Office for AI**
https://www.gov.uk/government/collections/a-guide-to-using-artificial-intelligence-in-the-public-sector

— **Data trusts: lessons from three pilots report, the ODI and Office for AI**
https://theodi.org/article/odi-data-trusts-report

— **Scaling Up The Ethical Artificial Intelligence MSc Pipeline report, The British Computer Society and Office for AI**
https://cdn.bcs.org/bcs-org-media/3047/ethical-ai.pdf

— **The Centre for Data Ethics and Innovation 2019/ 20 Work Programme**
https://www.gov.uk/government/publications/the-centre-for-data-ethics-and-innovation-cdei-2019-20-work-programme

— **Growing the artificial intelligence industry in the UK (2017), Independent report, Professor Dame Wendy Hall and Jérôme Pesenti**
https://www.gov.uk/government/publications/growing-the-artificial-intelligence-industry-in-the-uk

Support the next generation of AI talent

— **AI Fellowships:** visit The Alan Turing Institute for more detail and how to support the programme.

— **AI Masters courses:** to register an interest in sponsoring or providing AI Masters courses please contact AIMasters.IOC@bath.ac.uk.

INDUSTRIAL
STRATEGY

The AI Council

Leaders from business, academia and public sector have joined an independent expert committee created to help boost growth of AI in the UK, promote its adoption and ethical use in businesses and organisations across the country.

New Turing AI Fellowships

The Government is investing up to £50 million in new Turing AI Fellowships to attract, retain and develop world-leading talent to support the UK's strength in academia and research and vibrant AI ecosystems.

The Alan Turing Institute is the national institute for data science and artificial intelligence, with headquarters at the British Library.

Industry-funded Masters in AI

New AI masters places will be available at UK universities, funded by industry and in time for the September 2019 intake.

New Centres for Doctoral Training (CDTs) in AI

New CDTs – at 14 universities across country - will 1,000 PhD students to exploit potential of AI to transform the way work and live.

The CDTs are being funded by a £100M investment from UK Research and Innovation (UKRI), with £23M contributed from universities and £78M from partners in cash or in-kind contributions.

The Early Diagnosis Mission

AI and Data Mission: use data, artificial intelligence and innovation to transform the prevention, early diagnosis and treatment of chronic diseases by 2030.

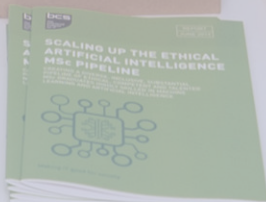'A Guide to using AI to solve problems in UK Government'

The new guide brings together best practice from the public and private sectors in the UK and overseas, to facilitate the public sector in adopting and developing their use of AI.

Supporting ethical AI development through Government procurement

WORLD ECONOMIC FORUM

The Office for AI is collaborating with the WEF Centre of the Fourth Industrial Revolution to co-design guidelines and tools that unlock AI adoption in the public sector.

SCALING UP THE ETHICAL ARTIFICIAL INTELLIGENCE MSc PIPELINE

Withdrawn 23 June 2025

About Office for Artificial Intelligence

The Office for Artificial Intelligence is a joint BEIS-DCMS unit responsible for overseeing implementation of the AI and Data Grand Challenge.

Its mission is to drive responsible and innovative uptake of AI technologies for the benefit of everyone in the UK. The Office for AI does this by engaging organisations, fostering growth and delivering recommendations around data, skills and public and private sector adoption.

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