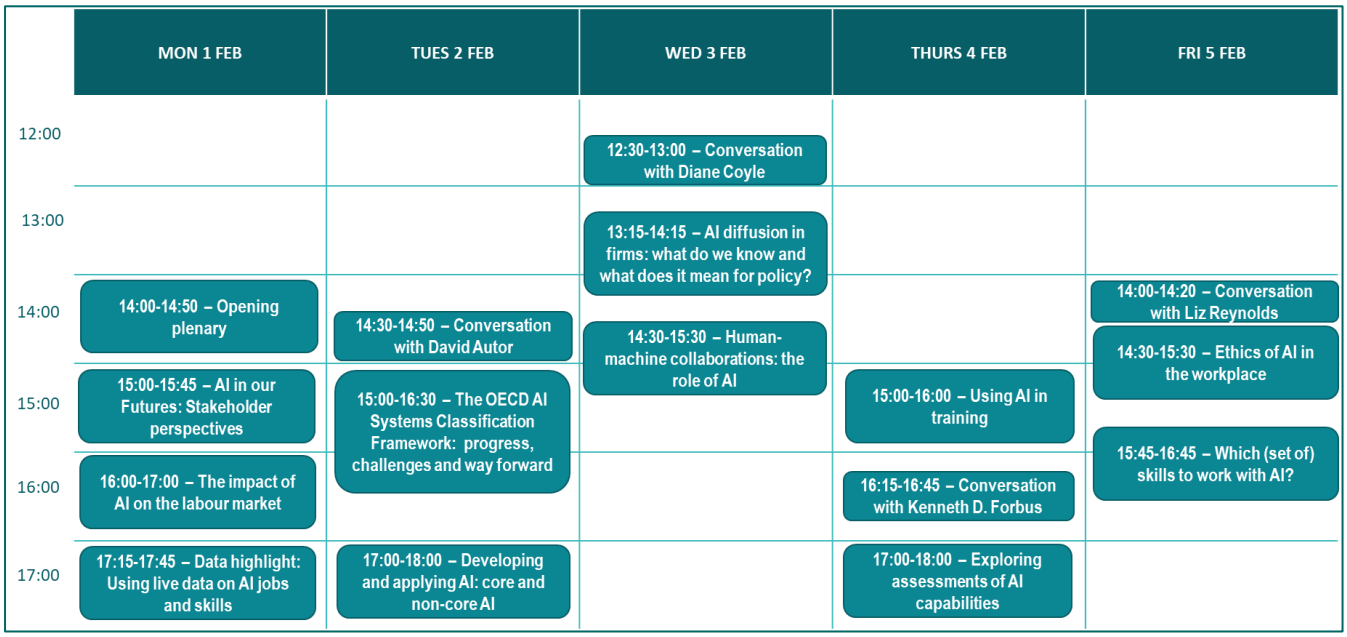
Federal Ministry of Labour and Social Affairs

OECD

International conference on AI in Work, Innovation, Productivity and Skills (AI-WIPS)

"At a glance" agenda



Detailed agenda

Opening plenary

AI is reshaping economies and societies across the world, offering new products and services, and promising to generate productivity gains, improve efficiency and lower costs. But the adoption of AI also raises questions and fuels anxieties; as AI transforms the way we work, we need to reflect how AI adoption in the workplace can be effective, beneficial, people-centred and accepted by the population at large. This opening session will set the scene for the week's events, with opening remarks from senior OECD and German representatives and expert keynote addresses.

Moderator: Ulrik Vestergaard Knudsen, OECD Deputy Secretary General

Angel Gurria, OECD Secretary General

Rolf Schmachtenberg, State Secretary, German Federal Ministry of Labour and Social Affairs

- *With keynote addresses from:*
    - Justine Cassell, Founding International Chair, PRAIRIE Institute for Interdisciplinary Research in AI
    - Erik Brynjolfsson, Jerry Yang and Akiko Yamazaki Professor and Senior Fellow at the Stanford Institute for Human-Centered AI (HAI)

AI in our Futures: Stakeholder perspectives

As artificial intelligence reshapes our futures, what do OECD's stakeholders consider to be the opportunities and challenges for work, innovation, productivity and skills? In this roundtable session, representatives from business (Business at OECD, BIAC), labour (TUAC), civil society (CSISAC) and the technical community (ITAC) will share their views and offer insights from their communities on the evidence gaps and policy priorities where the OECD can advance the debate.

Moderator: Audrey Plonk, Head of Digital Economy Policy Division, OECD Directorate for Science, Technology and Innovation

Panellists:

- Clara Neppel, Senior Director, European Business Operations, IEEE (for ITAC)
- Anna Byhovskaya, Senior Policy Advisor, TUAC
- Nicole Primmer, Senior Policy Director, Business at OECD (BIAC)
- Marc Rotenberg, Director, Center for AI and Digital Policy (for CSISAC)

With:

- Andreas Schleicher, Director, OECD Directorate for Education and Skills
- Stefano Scarpetta, Director, OECD Directorate for Employment, Labour and Social Affairs
- Andrew Wyckoff, Director, OECD Directorate for Science, Technology and Innovation

The Impact of AI on the Labour Market

What do we know about the impact of AI on the labour market? Will it further automate jobs and, if so, which ones? Will it improve job quality, or worsen it? And what will AI mean for disparities in the labour market? Will we be able to harness the opportunities that it offers to reduce inequalities or will we instead see inequality rise even further? This session will take stock of what we know about the impact of AI on the labour market and what we might expect to see in the future, including as a result of the Covid-19 crisis.

Moderator: Emma Nelson

Panellists:

- Stijn Broecke, Senior Economist (Future of Work), OECD Directorate for Employment, Labour and Social Affairs
- Jai-Joon Hur, Head of Employment Policy Research Division, Korea Labor Institute
- Frank Fossen, Associate Professor of Economics, University of Nevada
- Marie-Christine Fregin, Research Leader at Maastricht University´s Research Centre for Education and the Labour Market

- Jeremias Adams-Prassl, Professor of Law, University of Oxford

Data highlight: Using live data on AI jobs and skills

As AI diffusion and adoption evolve apace, timely data on AI jobs and skills can help inform policy. The OECD will launch a set of new indicators and interactive visualisations showing demand for AI jobs and skills by country, AI skills penetration and migration, women in AI R&D, AI software development skills and more. This session will feature a short demonstration of new interactive datasets available on the OECD's AI Policy Observatory (OECD.AI), followed by an exchange with OECD.AI data partners.

Moderator: Sarah Box, Senior Counsellor, OECD Directorate for Science, Technology and Innovation

Panellists:

- Igor Perisic, Chief Data Officer and VP of Engineering, LinkedIn
- Marko Grobelnik, AI Researcher & Digital Champion, Slovenia's Jozef Stefan Institute
- Bamini Jayabalasingham, Senior Analytical Product Manager, Elsevier
- Mike Linksvayer, Policy Director, Github

Conversation with with David Autor: The impact of artificial intelligence on labour

Stefano Scarpetta, Director for Employment, Labour and Social Affairs at the OECD, will be speaking to David Autor, Ford Professor and Associate Head at the MIT Department of Economics, about the history and future of workplace automation. What do we know? And where are the gaps in the evidence if we want to build evidence-based policy?

Speaker: David Autor, Ford Professor and Associate Head, MIT Department of Economics

Moderator: Interview with Stefano Scarpetta, Director, OECD Directorate for Employment, Labour and Social Affairs

The OECD AI Systems Classification Framework: progress, challenges and way forward

Different types of AI systems raise very different policy opportunities and challenges. As part of the AI-WIPS project, the OECD's Committee on Digital Economy Policy's Network of Experts on AI developed a user-friendly framework to classify AI systems. The framework provides a structure for assessing and classifying AI systems according to their impact on public policy in areas covered by the OECD AI Principles. This session will discuss the four dimensions of the draft *OECD AI Systems Classification Framework*, illustrate the usefulness of the framework using concrete AI systems as examples, and seek feedback and comments to support finalisation of the framework. Q&A will follow the discussion among panellists. In the session, a classification framework to understand the labour market impact will also be introduced.

Moderator: Karine Perset, Administrator at OECD.AI, OECD Directorate for Science, Technology and Innovation

Panellists:

- Audrey Plonk, Head of Digital Economy Policy Division, OECD Directorate for Science, Technology and Innovation
- Dewey Murdick, Director of Data Science, Center for Security and Emerging Technology (CSET), School of Foreign Service, Georgetown University

- Marko Grobelnik, AI Researcher & Digital Champion, AI Lab, Slovenia Jozef Stefan Institute
- Jack Clark, Co-chair, AI Index
- Emilia Gomez, Lead Scientist, Human behaviour and machine intelligence, European Commission DG Joint Research Centre (JRC)
- Peter Addo, Head of DataLab and Senior Data Scientist, Agence Française de Développement (AFD)
- Olivia Erdelyi. Lecturer, School of Law, University of Canterbury
- Marguerita Lane, Economist, OECD (ELS)
- Alina Sorgner, Assistant Professor of Applied Data Analytics, John Cabot University

Developing and applying AI: core and non-core AI

AI technologies are still in their relative infancy but already promise to have a strong effect on production and, consequently, jobs. To help understand the state of the art and the directions AI will take, this session will discuss how to distinguish core versus non-core (i.e. applications) AI-related developments. It will further discuss experimental evidence based on web-reading at scale about the economic agents (i.e. firms, universities, etc.) that are active in the AI space, as well as research using trademark data to shed light on firms developing and positioning AI-related goods and services in the marketplace. Panellists will discuss ongoing approaches and help explore ways forward to deepen our understanding.

Moderator: Chiara Criscuolo, Head of Productivity, Innovation and Entrepreneurship Division, OECD Directorate for Science, Technology and Innovation

Panellists:

- Mariagrazia Squicciarini, Senior Economist, OECD Directorate for Science, Technology and Innovation
- Dietmar Harhoff, Director, Max Planck Institute
- Andrew Toole, Chief Economist, USPTO
- Raja Chatila, Professor Emeritus of Artificial Intelligence, Robotics and IT Ethics, Sorbonne University
- Saniye Burcu Alaybeyi, Senior Director, Gartner

Conversation with Diane Coyle

In this session, the University of Cambridge's Bennett Professor of Public Policy, Diane Coyle, will speak with OECD Director of Science, Technology and Innovation, Andrew Wyckoff, about her views on AI and productivity, the technology's impacts on digital markets and competition, and the potential implications of AI's diffusion for achieving social objectives.

Speaker: Diane Coyle, Bennett Professor of Public Policy, University of Cambridge

Moderator: Interview with Andrew Wyckoff, Director, OECD Directorate for Science, Technology and Innovation

AI diffusion in firms – what do we know and what does it mean for policy?

New and emerging applications of AI systems are proliferating, yet development, diffusion and use of AI technologies are still at a relatively early level of maturity across many countries and firms. This session aims to explore the current understanding and knowledge gaps on the dynamics and drivers of AI diffusion, the factors affecting diffusion and the type of AI used by firms. This will inform the development and implementation of a survey of AI use by business being carried out under the AI-WIPS project.

Moderator: Alessandra Colecchia, Head of Science and Technology Policy Division, OECD Directorate for Science, Technology and Innovation

Panellists:

- Alistair Nolan, Senior Policy Analyst, OECD Directorate for Science, Technology and Innovation
- Benoit Bergeret, strategies.ai
- Irene Ek, Policy Analyst, Swedish Agency for Growth Policy Analysis
- Christian Rammer, Senior Researcher, ZEW
- Hodan Omaar, Policy Analyst, Center for Data Innovation

Human-machine collaborations: the role of AI

This session will discuss experimental approaches aimed at assessing the possibility for humans and machines to work side by side, and to identify those instances in which automation and AI may make workers redundant. The discussion will be informed by novel evidence on labour-substituting technologies that have been appearing on the market over the last 30 years, with a special focus on those commercialised over the last few years. As these technologies are sold on global markets they can directly or indirectly (through global value chains and input substitution) lead to some tasks (and possible occupations) becoming redundant. The discussion will also focus on how humans and machines can work side by side, and how technologies may become labour augmenting.

Moderator: Gabriela Ramos, Assistant Director-General for the Social and Human Sciences, UNESCO

Panellists:

- Jacopo Staccioli, Consultant, OECD Directorate for Science, Technology and Innovation
- James Bessen, Executive Director, Technology & Policy Research Initiative, Boston University
- Alexandra Cutean, Senior Director, Research & Policy at Information and Communications Technology Council (ICTC)
- Steven Miller, Professor (Emeritus), Singapore Management University
- Gabriella Chiarenza, Managing Editor, Regional & Community Outreach, Federal Reserve Bank, Boston

Using AI in training

Technologies and tools using AI have the potential to change how people learn by helping to identify training needs, tailor training content, deliver training in innovative ways, and assess learning outcomes. However, the use of AI for training may also suffer from important drawbacks, notably the fact that the cost and complexity of AI technologies could limit access to a selected few. In this session, panellists will discuss how AI can be used for education and training purposes, and explore opportunities and challenges in this context.

Moderator: Emma Nelson

Panellists:

- Glenda Quintini, Senior Economist, OECD Directorate for Employment, Labour and Social Affairs
- Florian Dautil, Chief Operations Officer, Bayes Impact
- Rosemary (Rose) Luckin, Professor of Learner Centred Design, UCL Knowledge Lab
- David Barnes, Vice President Global Workforce Policy, IBM Corporation
- Sophie Thompson, co-founder, VirtualSpeech
- Soon-Joo Gog, Chief Skills Officer, SkillsFuture Singapore

Conversation with Kenneth D. Forbus – Four revolutions in AI and their implications for AI capabilities

This keynote by Kenneth D. Forbus, Northwestern University, moderated by OECD Director for Education and Skills, Andreas Schleicher, will present an innovative analysis on the key ways AI capabilities currently fall short of human capabilities and describe the current work in AI that addresses those limitations.

Speaker: Kenneth D. Forbus, Northwestern University

Moderator: Andreas Schleicher, Director, OECD Directorate for Education and Skills

Exploring Assessments of AI Capabilities

This session will discuss the approach of the OECD's Future of Skills project to assessing AI capabilities and discuss examples of alternative tests available from education, occupational certification, cognitive psychology, and animal cognition.

Moderator: Lucy Cheke, Lecturer, University of Cambridge; Program Director, Leverhulme Centre for the Future of Intelligence

Panellists:

- José Hernández-Orallo, Professor, Universitat Politècnica de València
- Patrick Kyllonen, Distinguished Presidential Appointee, Educational Testing Service
- Britta Rüschoff, Professor, University of Applied Sciences Düsseldorf

Conversation with Liz Reynolds: Jobs in an Age of Intelligent Machines

Stefano Scarpetta, Director for Employment, Labour and Social Affairs at the OECD, will be speaking to Elisabeth Reynolds, Executive Director of the MIT Task Force on the Work of the Future, about her recent report "The Work of the Future: Building Better Jobs in an Age of Intelligent Machines" and how she sees the impact of AI play out in the labour market.

Speaker: Elisabeth Reynolds, Executive Director of the MIT Task Force on the Work of the Future

Moderator: Stefano Scarpetta, Director, OECD Directorate for Employment, Labour and Social Affairs

Ethics of AI in the workplace

What are the main ethical issues raised by the use of AI in the workplace? What tools can be used to make sure that humans are put first – and human centred values respected – when AI is used in the workplace? What safeguards should be considered to ensure transparency, explainability, safety and accountability? This are some of the questions that panellists will be called to discuss. The panel discussion will be followed by Q&A.

Moderator: Emma Nelson

Panellists:

- Angelica Salvi Del Pero, Senior Advisor, OECD Directorate for Employment, Labour and Social Affairs
- Cristina Colclough, Founder, The Why Not Lab
- Meredith Withaker, Research Professor, Co-founder and Faculty Director, AI Now Institute, NYU
- Valerio di Stefano, BOF-ZAP Professor of Labour Law, KU Leuven,
- Sylvain Duranton, BCG Gamma / Global Leader BCG GAMMA

Which (set of) skills to work with AI?

This session will discuss emerging evidence on the human capital needed to work with AI and, in particular, on the (set of) skills and competences characterising AI-related jobs, shedding light on the occupations and sectors demanding the cognitive and socio-emotional skills required to work with AI.

Moderator: Francesca Borgonovi, Senior Economist, OECD Centre for Skills

Panellists:

- Lea Samek, Young Professional, OECD Directorate for Science, Technology and Innovation
- Mirko Draca, Professor, Department of Economics, University of Warwick
- Bledi Taska, Chief Economist, Burning Glass Technologies
- Hanan Salam, Co-founder, Women in AI