AI4ALL

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

#AI4ALL

Inclusive and Sustainable AI for All (ISAIA)

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Agenda

- AI: what are we talking about?
- AI and digital evolution «n» years from now: scenarios
- AI4ALL goals, team, initiatives
- Call for action: L.E.A.D.
- Next steps
- Contacts

AI4ALL

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

AI: what are we talking about? A test...

The rapid iterations and proliferation of **artificial intelligence (AI)** across all aspects of life and all sectors are posing new challenges regarding the nature of machine intelligence, the collection and use of personal data, the role of humans and machines in decision-making, and the impact of **AI** on social and environmental sustainability. It is essential that education systems prepare students not only with the knowledge and skills to use **AI**, but also with insight into the potential impact of technology on societies and the environment at large. Given the transformative potential of **AI** for human societies, it is crucial to equip students with the values, knowledge and skills needed for the effective use and active co-creation of **AI**.

From: **AI** competency framework for students (UNESCO)

The rapid iterations and proliferation of **Digital Services (DS)** across all aspects of life and all sectors are posing new challenges regarding the nature of machine intelligence, the collection and use of personal data, the role of humans and machines in decision-making, and the impact of **Digital** on social and environmental sustainability. It is essential that education systems prepare students not only with the knowledge and skills to use **Digital tools**, but also with insight into the potential impact of technology on societies and the environment at large. Given the transformative potential of **Digital Transformation** for human societies, it is crucial to equip students with the values, knowledge and skills needed for the effective use and active co-creation of **Digital Services**.

From: **Digital?** competency framework for students (UNESCO)

AI: what are we talking about?

- When we talk about AI, we are actually talking about digital transformation or digital evolution
- AI is just the tip of the iceberg. Underwater there are tons of data, knowledge bases, training data sets (and bias), infrastructures…
- The real impact isn't tied to a single technology, but to a multitude of them: AI needs data and knowledge, and digital data and knowledge require internet…
- In fact, we are not just talking about technology, but about the impact of technology on society, organizations, culture, people… and here Inclusion and Sustainability are two major topics

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Agenda

- AI: what are we talking about?
- AI and digital evolution «n» years from now: scenarios
- AI4ALL goals, team, initiatives
- Call for action: L.E.A.D.
- Next steps
- Contacts

AI4ALL

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Scenario 1: AI in Continuity with the Current Digital Evolution

In this scenario, AI follows the same trajectory as the current digital evolution, leading to a continuation of the challenges we have already encountered:

- **Non-inclusive services**: AI systems are not designed with inclusivity in mind from the start. Attempts to retrofit solutions to make them more accessible and inclusive after they are already deployed are often inadequate or impossible.
- **Increased bias due to lack of diversity:** Limited diversity in data and AI development teams exacerbates existing biases, leading to unequal outcomes and further marginalizing underrepresented groups. This results in a deeper digital exclusion.
- **Entire continents excluded:** Underdeveloped regions may be left behind, unable to access or leverage AI technology due to infrastructure gaps and high costs. The digital divide widens, leaving entire populations out of the global AI-driven economy.
- **Inaccessible costs and unsustainable development:** The massive demand for computational power from AI systems leads to a heavy reliance on hydrocarbons and nuclear energy, plus a disproportionate and unendurable consumption of water resources to support data centers. Renewable energy is not prioritized, making the development unsustainable, both economically and environmentally.
- **Ethical concerns**: AI accelerates job displacement without creating adequate replacement opportunities, leading to widespread job loss. Privacy concerns escalate as AI systems become more invasive, with potentially inadequate protections for personal data.

Scenario 2: The case for an Inclusive AND Sustainable AI (1/2)

In this alternative scenario, AI development takes a different path, with a focus on inclusion, accessibility, and sustainability from the outset:

- **Inclusive services**: AI systems are designed from the ground up to be fair, accessible, and equitable. Inclusion is not an afterthought, but a fundamental principle in the design process.
- **Diverse Data Sources:** The evolution of AI is driven by the deliberate and widespread incorporation of diverse data sources. This focus on data diversity is crucial to the development of fair, equitable, and high-performing AI systems that reflect the varied needs and experiences of global populations.
- **Fair and Transparent Algorithms:** In the development of AI systems, fairness and transparency are essential components that address both the ethical and practical challenges posed by automated decision-making processes. Fair and transparent algorithms aim to promote equity, build trust, and ensure accountability in various domains where AI is deployed, such as healthcare, finance, hiring, law enforcement, and more.
- **Accessible digital evolution for all:** AI democratizes access to technology, even in less developed regions. These areas are able to bypass the mistakes made by developed countries, leapfrogging directly into a more equitable digital future. Continents that were left behind now have the opportunity to join the global AI-driven economy.

Scenario 2: The case for an Inclusive AND Sustainable AI (2/2)

- **Affordable costs:** The cost of developing and deploying AI becomes more accessible, allowing smaller businesses, underdeveloped regions and governments less able to impact the global context, to benefit from its capabilities.
- **Minimized digital divide:** Efforts to close the digital divide are prioritized, with infrastructure improvements and policies that ensure that even remote or underdeveloped regions have access to the internet and digital technologies.
- **Sustainability and green AI:** Renewable energy is the backbone of AI development. Data centers are powered by green energy sources, making the growth of AI sustainable and reducing the environmental impact of digital expansion.
- **Ethics and privacy embedded in AI:** Ethical concerns such as job displacement are addressed through upskilling programs and new economic opportunities. AI systems are also designed with strong privacy protections, giving individuals control over their data.

AI is an extremely powerful tool. It Is the nuclear power of Digital. Inclusive and Sustainable AI is the only way to be assured that the “nuclear power” will be safe and for the good of humanity. Governance will be paramount!

AI4ALL

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Agenda

- AI: what are we talking about?
- AI and digital evolution «n» years from now: scenarios
- AI4ALL goals, team, initiatives
- Call for action: L.E.A.D.
- Next steps
- Contacts

AI4ALL

AI4ALL initiative: goals, team, activities

GOALS:

- Explore and explain the deep connections between inclusion, sustainability and future of AI and Digital Evolution
- Spread the awareness about the need of an AI4ALL
- Work as a stimulus for all the private and public organizations working on AI to consider inclusion and sustainability on AI development and/or AI regulations

TEAM:

- Bonaria Biancu (Università di Milano-Bicocca) and Giuliano Pozza (Università Cattolica del Sacro Cuore)

ACTIVITIES:

- Grow the team (Creation of a panel of experts and contributors)
- Collecting best practices, articles and materials around the AI44ALL topic(s) and make these available for all the community
- Disseminate and network through workshops, webinars, articles, publications, EUNIS Conference…

AI4ALL

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Call for action: L.E.A.D.

- Learn
  - Exchange knowledge and experiences between and among AI communities
  -
- Engage
  - Engage actively with the AI community by participating in forums, attending conferences, and contributing to open-source projects
  - **Join AI4ALL!**
- take Actions
  - Work collaboratively with diverse teams, including domain experts, ethicists, and end users. There are many ways to contribute, pls. contact us for more details
- Disseminate
  - Disseminate the case for an Inclusive and Sustainable AI. Use your network or create a new one that includes different perspectives and experiences

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Agenda

- AI: what are we talking about?
- AI and digital evolution «n» years from now: scenarios
- AI4ALL goals, team, initiatives
- Call for action: L.E.A.D.
- Next steps
- Contacts

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Next Steps

- In 2024 members may expect
  - consultations on member's interest and priorities
  - reaching-out to identify relevant groups/initiatives to liaise with
  - proposals for topics to address
  - links to relevant papers, initiatives, events

- Early 2025 a first online event will take place, to:
  - present and discussion on one of the preferred topics
  - jointly refine the scope and priorities
  - agree on operations and communication

- At the EUNIS congress 2025 (June, in Belfast, UK):
  - SIG AI4ALL will organise a pre-conference workshop (half day)
  - Proposals for presentations will be invited on AI4ALL topics

AI4ALL

EUNIS
EUROPEAN UNIVERSITY INFORMATION SYSTEMS

Contacts:

•Bonaria Biancu (Università di Milano-Bicocca)

(https://www.linkedin.com/in/bonariabiancu/)

•Giuliano Pozza (Università Cattolica del Sacro Cuore)

(https://www.linkedin.com/in/gpozza/)