4eu+ AIDAYS

Prague, **13 - 14 June** 2024

PROGRAM



13TH JUNE - AI IN SOCIETY: POLICY AND SOCIETAL IMPACT

WELCOME REMARKS & DEBATE: "Strengthening the European AI Ecosystem: Collaborative Research, Innovation, and Education"

9:00 - 10:30

Hall of Patriots

<u>Ladislav Krištoufek</u>, vice-rector for Research Charles University
<u>Isabelle Kratz</u>, Secretary General, 4EU+
<u>Jiří Nantl</u>, Deputy Minister of Education, Youth and Sports
<u>Helena Langšádlová</u>, Minister of Science, Research and Innovation

COFFEE BREAK

10:30 - 11:00

PANEL: "Al in Governance: Balancing Benefits and Biases"

11:00 - 12:00

Hall of Patriots

<u>Annelore Verhagen</u>, OECD (AI for Social Benefits)

<u>Bolette Sandford Pedersen</u>, UCPH (AI's cultural and language biases)

<u>Anne Jürgens</u>, UHD (The Germany-Estonia Experience)

TALK: "Soul and AI"

Small Aula

František Štěch, Charles University

PANEL: "Al Ethics: Navigating Morality and Technology"

František Štěch, Charles University
Sofia Pirandello, UniMi
Giuseppe Ugazio, UNIGE

TALK: "AI in Education Policy: Opportunities and Challenges"

14:30 - 15:30
Hall of Patriots

14:00 - 14:30

Danielle Elizabeth Hagood, UCPH

COFFEE BREAK

Specifically educational policy and how it is enacted in university's large scale strategic initiatives for digital transformation. Asking what is working, what isn't, and how does implementation overall actually achieve the goals for AI in education learning outcomes at a student and teaching level.

TALK: "Al and Gender Bias"

Isabelle Collet, UNIGE

Small Aula

It's a man's world! Gender biais in IA

In the Western world today, women make up less than 15% of computer science students. In the workforce, they represent less than 20% of technical jobs in the digital sector. This virtual absence of gender diversity in the digital sector has implications not only for gender equality in employment, but also for the inclusivity and performance of digital applications.

The aim of this talk is to highlight the gender bias in artificial intelligence. We'll start with a brief history of Al. At the time of the Second World War, the first computer scientists, men who are the fathers of the modern computer, such as John von Neuman or Alan Turing, were building large calculating machines, but in fact, they were dreaming of reproducing the human brain. 70 years on, the world of Al is still as male as ever. Artificial intelligence suffers from two types of bias: allocation bias and representation bias. Allocation bias occurs when a system shows differences in performance between social groups. Representation biases contribute to the perpetuation of stereotypes. The great uniformity of the population of developers and managers (white, middle- or upper-class males) tends to obscure the needs and characteristics of other populations, particularly women. Ultimately, Al is nothing more than a mirror of our unequal society. It's time to think in terms of an Al ethic by design, inspired by an ethic of care, to hope for an inclusive digital transition.

AI TECHNOLOGY SHOWCASE

15:30 - 17:00

ComGuide: Using conversational AI in virtual patients to train and practice difficult communication in healthcare.

Jan Hrdlička, ComGuide

ComGuide is a technology startup that focuses on training difficult communication in healthcare, i.e., communication in which strong emotions are present. For this purpose, we use virtual reality and virtual patients with conversational AI.

ELITR: Joining Forces with Interpreters for Live Speech Translation into 40+ Languages

The Institute of Formal and Applied Linguistics (ÚFAL MFF CU)

ÚFAL MFF CU will demonstrate the result of the EU project ELITR (European Live Translator), coordinated by Ondřej Bojar in the years 2019-2022. One of the main outcomes of the project is a system which simultaneously translates speech from a range of source languages into 40+ target languages. This is an affordable solution for multilingual events that need to cover many languages beyond the capacity of human simultaneous interpreting. Noteworthy, ELITR is able to benefit from the interpreters live output.

Large Language Models in Chatbot Applications

Ondřej Dušek, Charles University

Voices of Tomorrow: Harnessing MAMA Al's Speech Synthesis in Broadcasting and Beyond

Jan Kleindienst, The MAMA Al

In the talk, we explore the benefits of creating top-quality synthetic voices using MAMA Al's deep learning technology, known as mVoice. We highlight several innovative use cases where mVoice Al is instrumental. These include powering the daily broadcasting of virtual moderators on commercial radios (such as Hacsiko and four other artificial voices on Seznam's Express FM), facilitating neuroplasticity in conversational assistants, narrating audiobooks, generating audio descriptions for movies, crafting immersive virtual avatars, enriching user experiences in virtual reality, etc. We believe that some of the use cases are truly the first-of-the-kind deployments in Europe.

Mechanical Corpus Linguist

Jiří Milička, Charles University

NETWORKING WITH RECEPTION

17:00 - 19:00



14TH JUNE - AI TRANSFORMATIONS IN EDUCATION AND RESEARCH

TALK: "Emerging AI Paradigms in Academic Research"

9:00 - 10:30

Hall of Patriots

Renata Włoch and Katarzyna Śledziewska, UW

Universities worldwide are navigating an ever-evolving educational landscape, marked by the rapid integration of artificial intelligence (AI). This presentation will offer an succinct exploration of the transformative role of General AI (GenAI) in academia, with a special focus on the challenges and opportunities it presents in teaching, research, and skill development. Drawing from extensive literature review and recent survey study conducted with the employees and students at the University of Warsaw, we will reveal how the academic community is using GenAI, highlighting its impact on the tasks scholars perform and the methodologies employed in teaching. Our discussion will touch upon four key areas where AI's influence is most significant: research approaches, processes for documenting and reporting research findings, teaching methodologies, and essential skill sets for students.

WORKSHOP: Beyond the Jagged Frontier: Practical Strategies for Integrating AI in Academia

Small Aula

Raphaël Thézé, UNIGE

The recent surge of generative AI tools and their applicability to complex tasks, previously deemed to require human-like 'intelligence', has ignited widespread debate and confusion. Dell'Acqua et al. (2003) argue that AI capabilities create a 'jagged frontier', wherein some tasks are executed with remarkable quality, while others, even if seemingly related, yield subpar outcomes. This dichotomy, along with the AI's extensive range of capabilities that span across domains traditionally segregated into distinct fields or professions, underscores the urgent need to reassess our approaches to task categorization. To leverage AI's full potential and facilitate its integration within our institutions, it is imperative to view its use from a problem-solving perspective that transcends conventional disciplinary boundaries and to cultivate unique skill sets.

TALK: "Using artificial intelligence for teaching and learning in STEM"

Big Conference Room

Jesper Bruun, UCPH

Generative AI will most likely change how students participate in and acquire knowledge, skills, and competencies in STEM subjects. These technologies will probably even change what it means to learn STEM. Educational systems are not prepared for this, and research is only just beginning to emerge to address these issues. In this talk, I will present investigations into how students, teachers, and educational scientists can use generative AI technology to learn, teach, and investigate STEM learning in educational systems. I will provide examples of how students and teachers may productively use generative AI in teaching/learning situations, and how educational scientists may use generative AI as well as AI agents for modelling and analyses. In doing so, I will identify some of the gaps that future research might fruitfully address.

COFFEE BREAK

10:30 - 11:00

TALK: "Al and the Future of Learning"

11:00 - 12:00

Annette Pedersen and Mikala Hansbøl, UCPH

Hall of Patriots

Presentation of the fresh results of a survey among the students in the Humanities regarding "Students' use of and attitudes toward AI in education".

TALK: "Al and Programming: Chances for Industry and Education"

Small Aula

<u>Artur Andrzejak</u>

The availability of extensive code repositories, commonly referred to as "big code," combined with the rise of Transformer-based machine learning methodologies, has recently propelled a significant advancement in Al-powered development tools. This breakthrough has yielded highly proficient code recommenders like Github Copilot and has given rise to effective Al solutions for automatic error detection, code-to-code translation, unit test generation, program synthesis, and more. We will overview the state-of-the-art tools in this domain, exploring their impact on the software development industry and computer science education. On the technical front, we take a closer look at the realms of automatic code repair and model-based translation between high-level programming languages. Specifically, we demonstrate how the performance of large language models can be elevated for diverse software engineering tasks through meta-strategies such as "three-of-thoughts."

WORKSHOP: ""Innovations in AI for teaching Digital Humanities""

Big Conference Room

Motasem Alrahabi and Clotilde Chevet, SU

LUNCH

12:00 - 13:00

TALK: "Al and Philanthropy"

13:00 - 14:00

Giuseppe Ugazio, UNIGE

Hall of Patriots

WORKSHOP: "Artificial Intelligence in STEM teaching: Working with examples of student and teacher use of Chat GPT"

Small Aula

Jesper Bruun, UCPH (focusing on AI in teaching preparation)

Public conversation is bubbling with discussions on the ethics, practicalities, and legal aspects of what we commonly refer to as artificial intelligence, and its intended uses. However, yet, there seems to be little discussion about how students and teachers can use Al-tools fruitfully, the affordances of these tools in terms of learning and teaching STEM, or how Al-tools fit with notions such as critical thinking and scientific literacy. In this workshop, we will engage with examples of using ChatGPT and other generative Al systems from students' and teachers' perspective. We will focus on how students can use e.g., Al as a sparring partner during group work and how teachers can use Al for the purposes of formative feedback. We will round off the workshop with a short discussion on the ethical issues that teachers and students might address in their using generative Al-systems.

ROUNDTABLE: "Generative AI and competencies development for HE teachers"

13:00 - 14:00

Big Conference Room

Annette Pedersen and Mikala Hansbøl, UCPH Alrahabi Motasem, SU Marie-Hélène Abel, Sorbonne University Alliance

The session will delve into essential discussions regarding the development of competencies, exploring how universities can facilitate this growth, sharing experiences thus far, and examining the challenges encountered. The session will commence with an introduction to the topic through our personal experiences and pose questions for further exploration in smaller group discussions.

WORKSHOP: "AI Competencies for Tomorow's Workforce"(gen AI for beginners)

13:00 - 16:00

Ondřej Hrách, AIGNOS

Small Conference Room

FAREWELL COFFEE

14:30 - 15:00

















