6TH-10TH MARCH 2023, PISA, ITALY

SPRING SCHOOL

ETHOS+TEKHNE A NEW GENERATION OF AI RESEARCHERS

UNDERSTAND THE IMPACT OF AI WITH AI RESEARCHERS, PHILOSOPHERS, ECONOMISTS, BIG-TECH LEADERS, JOURNALISTS, LAWYERS, MEMBERS OF THE EU PARLIAMENT AND CITIZENS.

https://community.eelisa.eu/activities/ethos-tekhne-a-new-generation-of-ai-researchers/







GOAL

In fulfilment of the EELISA Board Declaration, this school aims to align technical excellence with social impact in the upcoming generation of AI researchers and developers, by combining their *tekhne* with *ethos*.

SCHOOL PROGRAMME

The school program will unfold over a week of thematic days around the **Ethics Guidelines for Trustworthy AI**, drafted by the AI High-Level Expert Group nominated by the European Commission. Each day will address a specific question, thanks to lectures in the morning and practical activities in the afternoon. The five topics will be:

- 1) the socioeconomic impact of Al
- 2) EU regulations for a fair and private Al
- 3) explainable AI (XAI)
- 4) Al decision-making biases identification and Al trustworthiness assessment
- 5) legal liability in Al



DAY 1: THE SOCIO-ECONOMIC IMPACT OF AI

10:00-11:30 am Is there a digital capitalism? - Lecture Prof Mario Pianta, Scuola Normale Superiore 11:30-11:45 am break Understanding the Impacts of Digital Platforms - Lecture 11:45-1:00 pm Prof Dario Guarascio, La Sapienza University of Rome 1:00-2:30 pm Lunch Title TBC - Online lecture 2:30-4:00 pm Prof Luciano Floridi, University of Oxford 4:00-5:00 pm break 5:00-6:30 pm Title TBC - Hybrid discussion panel Blaise Aguera y Arcas, Google Research Vice-President Naila Murray, Meta Al research engineer Moderated by Laura Carrer, independent investigative journalist, Wired and info.nodes



DAY 2: EU REGULATIONS FOR A FAIR AND PRIVATE AI

10:00-11:30 am Ethics or law for AI? This is not the question - Lecture Prof Giovanni Comande', Scuola Superiore Sant'Anna 11:30-11:45 am break You and your images - Lecture 11:45-1:00 pm Prof Andrea Cavallaro, Queen Mary University of London 1:00-2:30 pm Lunch 2:30-3:45 pm The EU AI Act - Lecture Dimitris Tzanidakis, Policy Advisor, European Parliament break 3:45-4:00 pm How will EU policies frame the work of an AI programmer? 4:00-5:30 pm - Hybrid discussion panel Brando Benifei, co-rapporteur of the Al Act, Member of the European Parliament Kim Van Sparrentak, Member of the European Parliament, AIDA Committee Diletta Huyskes, Head of Advocacy & Policy, Privacy Network and PhD Researcher, Università di Milano Moderated by Viola Stefanello, tech reporter, Il Post



DAY 3: EXPLAINABLE AI (XAI)

10:00-11:30 am	A gentle introduction to explainable AI - Lecture Prof Wojciech Samek, Technical University of Berlin & Fraunhofer Heinrich Hertz Institute
11:30-12:00 am	break
12:00-12:30 pm	Explainable or Interpretable AI? Practical examples in the energy sector - Short talk Konstantinos Parginos, PhD student, MINES ParisTech
12:30-1:00 pm	Using Explanability for Computer Vision Model Diagnosis: a Socio-Technical Perspective - Short talk Agathe Balayn, PhD candidate, TU Delft
1:00-2:30 pm	Lunch (and group photo)
2:30-4:00 pm	Practical introduction to XAI - Tutorial (part I) Prof Fosca Giannotti & Francesca Naretto, Scuola Normale Superiore
4:00-4:15 pm	break
4:15-5:30 pm	Practical introduction to XAI - Tutorial (part II) Prof Fosca Giannotti & Francesca Naretto, Scuola Normale Superiore



DAY 4: AI BIASES AND TRUSTWORTHINESS

10:00-11:15 am	Addressing bias in big data and AI for health care - Online lecture
	Natalia Norori, Open Access advocate and epidemiologist Prof Athina Tzovara, Univ. of Bern & Univ. of California Berkeley
11:15-11:30 am	break
11:30-12:15 am	Machine learning in the EU health care: ethical, legal and social issues - Online lecture
	Prof Iñigo de Miguel Beriain, University of the Basque Country
12:15-1:00 pm	Auditing the quality of datasets used in algorithmic decision-making systems - Lecture
	TBC
1:00-2:30 pm	Lunch
2:30-4:00 pm	Trustworthy AI in healthcare: how to design, develop and deploy trustworthy deep learning for medical image analysis - Tutorial (part I)
	Dr Sara Moccia, Scuola Superiore Sant'Anna
	Dr Simona Tiribelli, Institute for Technology and Global Health & Università degli Studi di Macerata
4:00-4:15 pm	break

Tutorial (part II)

4:15-5:30 pm

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DAY 5: LIABILITY IN AI

10:00-11:15 am Potential legal implications of breaking AI regulations in EU, US and China - Lecture Karin Tafur, legal-tech entrepreneur, TNP Consultants 11:15-11:30 am break 11:30-1:00 am Moot court competition: an Al case study - Debate Gabriele Franco, junior associate, Panetta Law firm 1:00-2:00 pm Lunch 2:00-5:00 pm Challenges and potential solutions - Group writing Write an extended abstract in groups of five participants on a topic of the spring school. This work will represent the test to award the ECTS to the participant and it will be employed to submit a joint opinion paper. 5:00-8:30 pm Free time 8:30-11:30 pm Open Mic on AI - Movie discussion night Dr Federica Merenda, research fellow in Political Philosophy, Scuola Superiore Sant'Anna Citizens in Pisa



HOW TO PARTICIPATE?

You can attend the school either online or on-site.

Online

By clicking here and filling out the form, a few days before the school you will receive a link to watch the activities online. Registration is free, with no selection process. During the school, your questions will always be welcomed, but remote attendance cannot guarantee that you will be able to ask them, as on-site questions will be answered first.

Active participation on-site

Seats are limited to 30 participants in total. The school targets early-career researchers (e.g. research assistants, PhD students, post-docs, exceptional master students) in AI or computational sciences. You can send your application by creating an account and uploading your documents on this webpage: https://www.santannapisa.it/en/alta-formazione/eelisa-spring-school-ethos-tekhne-new-generation-ai-researchers. For more information on the application material, please refer to Art. 8 B of the application Call. The deadline to upload your application material is February 2nd, 2023, 11:59 pm (CET). If you are not selected, you can always attend the school online.



VENUE

Piazza dei Cavalieri, 7
Palazzo della Carovana, Scuola Normale Superiore 56126
Pisa
Italy

CONTACTS

International relations and EELISA Camille Roger

Participant registrations
Jean-Baptiste Astruc

Applications for on-site attendance Prof Calogero Maria Oddo

School programme
Stefano Vrizzi

camille.roger@psl.eu

jean-baptiste.astruc@psl.eu

calogero.oddo@santannapisa.it

stefano.vrizzi@ens.psl.eu

EELISO

ORGANISING TEAM

Raffaele Salvia
Daniele Cavalli
Filippo Galli
Laura State
Konstantinos Parginos
Alberto Vergani
Giuseppe Parisi
Letizia Lamperti
Viola Stefanello
Stefano Vrizzi

Logistics & movie night co-manager

Day 1 manager

Day 2 manager

Day 3 manager

Day 2 & 3 co-manager

Day 4 manager & movie night co-manager

Day 5 manager

Movie night co-manager

Panel discussion manager

Event ideator & team coordinator

SCIENTIFIC COMMITTEE

Lorenzo Bartalesi
Sara Moccia
Calogero Oddo
Roberto Pellungrini
Florian Yger

Scuola Normale Superiore, Pisa, Italy Scuola Superiore Sant'Anna, Pisa, Italy Scuola Superiore Sant'Anna, Pisa, Italy Scuola Normale Superiore, Pisa, Italy Paris Sciences et Lettres, Paris, France

