

APPLICATION OF ARTIFICIAL INTELLIGENCE IN HEALTH SECTOR *A MULTIDISCIPLINARY PERSPECTIVE*

Following the EU proposal on AI act, by the ‘artificial intelligence system’ (AI system) we need to understand a software that is developed with one or more of the indicated in the Regulation techniques and approaches, for a given set of human-defined objectives, generate outputs such as content, predictions, recommendations, or decisions influencing the environments they interact with. The future of medical practices will be soon widely affected by the use of artificial intelligence, that has strong potential to improve health sector in the areas such as in particular advancement of medical sciences, diagnosis, surgery and many other. The Conference aims to bring together legal scholars and experts from a range of backgrounds to discuss current challenges of the application of AI-driven systems and devices in healthcare. The discussions shall be divided into traditional, theoretical considerations and practical round table, designated to submit a chosen latest AI-driven invention for medicine to brainstorming carried out from representants of various scientific disciplines. We invite submissions of abstract along a regular and a special track.

Organized by:

- Law Department (DIG) and Movement Sciences and Wellness Department (DISMEB) of “Parthenope” University in Naples
- Department of Insurance and Medical Law, Faculty of Law and Administration of Nicolaus Copernicus University in Toruń
- Department of Clinical Data Science (CDS) of Maastricht University in Maastricht

Topics:

We invite submission of abstracts on Artificial Intelligence in medicine, covering foundations, methods, tools, systems and applications. Topics may include, but are not limited to, the following:

- National and EU regulation concerning AI
- Legal implications of AI use in medical sector
- Computational methods for patients’ diagnosis
- Computer-assisted surgeries
- Computable representations of legal rules for AI in medicine
- Medical decision support systems
- European Health Data Space
- Ethical, legal, fairness, accountability, and transparency subjects arising from the use of AI in medicine, compliance of new technologies
- Explainable AI for medicine
- Information extraction from medical databases and texts
- Interdisciplinary applications of legal informatics methods and systems in medicine
- Knowledge acquisition techniques for the medical domain, including related applications of natural language processing, argument, and data mining
- Knowledge representation, knowledge engineering, and ontologies in the medical domain
- Machine learning and data analytics applied to the medical domain
- The use of humanoid robots for medicine

- Prevention of discrimination for AI in medicine
- Informed consent for AI in medicine
- Doctors' and providers' liability in terms of the use of AI in medicine
- Security and safety concerns of medical countermeasure online supply.

The organizers are keen to broaden its scope to include topics of growing importance and to establish links to neighboring disciplines. In addition to the regular discussion track, we also feature the following special track:

- (1) A new special cross-disciplinary outreach track on Artificial Intelligence for Medical Devices. The interdisciplinary approach is motivated the multi-layered leverage of such technologies; hence, the organizers shall create space for specialists and scientists from a broad range discipline in order to benefit from an exchange of ideas and collaborations around concrete medical device innovation, starting with technical approaches, and commitment to using data-driven technology for policy, medical point of view and social good.

Abstract submissions:

Abstracts for regular discussion track (for a speech up to 15 min length, including references for relevant literature) should present contributions from relevant topics. Due to rapidly moving field at the intersection of law, artificial intelligence and medicine all submissions must make clear their relation to prior work and novel scientific contribution, as well as contain a satisfying amount of discussion of their findings. Reviewing will be double blind. Abstracts submitted for review must not include names and affiliations of the authors.

Submissions expressing the interest in participation in round table are welcome from representants of any discipline and could include an invention to be presented under round table discussion.

Please send the abstract to: conference19october2023@gmail.com

Important dates:

- Deadline for submission of abstracts: **10 September 2023**
- Deadline for submission of an invention to be submitted under round table discussion: **10 September 2023**
- Notification of acceptance: **30 September 2023**
- **Conference date: 19 October 2023.**

The Conference will be held either in presence at “Parthenope” University of Naples, via Generale Parisi 13, 80132 Naples or on-line.

Organization:

Scientific Committee: Prof. Mariaconcetta D'Arienzo, DISMEB, “Parthenope” University of Naples; dr hab. Kinga Bączyk-Rozwadowska, Prof. UMK, Nicolaus Copernicus University in

Toruń; dr hab. Monika Wałachowska, Prof. UMK, Nicolaus Copernicus University in Toruń; Prof. Sara Pugliese, DIG; “Parthenope” University of Naples; Prof. Andre Dekker, Maastricht University.

Management Committee: Emilia Wesolowska; Alessio Pietracupa; Alessio Scaffidi; Valerio Maione; Bianca Nicla Romano; Vincenzo Visone.