

Big Data In Medicine: Challenges and Opportunities

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CERN

Book of Abstracts

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Welcome and Introduction

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CERN and Medical Applications

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Healthcare Challenges in the 21st Century

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Social and digital innovations to improve on SGDs in the strategic view of WHO

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Digital Health Ecosystems: Gaps and Challenges

The social and physical ecosystems that affect human health have been studied extensively, but typically within specific disciplines. The Sustainable Development Goals are nurturing more cross-sectoral perspectives. Progress is being made in articulating the gaps and challenges for social and technical infrastructures that can support digital health ecosystems. This talk uses the perspective of developing countries to illustrate some of the gaps and challenges that are being faced, and some of the opportunities an open lab environment can offer.

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Industrial Collaborations

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The EU Health Cloud and Future EC Strategies

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Grid/ Cloud Infrastructures for Healthcare and Medical Research in the UK

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Blockchain and Medical Applications

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Data Protection Policies and Regulations

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Medical Data Formats and Standardization Challenges

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FAIR Data

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Distributed Databases

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Discussion and Wrap-up

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Closed session: Strategy Paper Discussion

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Reflecting opportunities and risks – AI ethics and its broad range of issues

Current advances in research, development and application of artificial intelligence (AI) systems have yielded a far-reaching discourse on AI ethics. In consequence, a number of codes of ethics have been released in recent years. These guidelines comprise normative principles and recommendations aimed to harness the “disruptive” potentials of new AI technologies. The talk uses those guidelines to give a broad overview of the many issues of AI ethics. It also focusses on general considerations about AI ethics, its effectiveness and the ways it can be put into practice.

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Meaningful Control of AI and Machine Ethics

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Personalised Medicine: Opportunities and Challenges

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Computational Modelling and Simulation of Biophysical Dynamics in Medicine

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Epidemiological Studies in the Big Data Era

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AI-Based Decision Support System for Doctors and Patients

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Healthcare and Developing Countries

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Discussion and Wrap-up

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In Silico Trials: Current Status and Future Perspectives

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Extra presentations