



## Sustainable Education in a Digital Age of rapidly Emerging Technologies

### IFIP TC3 Zanzibar Declaration – Webinar 1: Social Impacts of Big Data Analysis and Machine Learning – Educational Implications

08 March 2021, 09.00-10.30 a.m. GMT

#### Brief background

IFIP Technical Committee 3 (TC3) agreed in its Annual General Meeting in April 2019, held in Zanzibar, Tanzania, to initiate a declaration on '**Sustainable Education in a Digital Age of rapidly Emerging Technologies**'. This 'Zanzibar Declaration' (ZD) focuses on future educational challenges that arise from rapidly emerging technologies impacting societies and communities ([background details are shown on the website](#)).

This webinar is the first in a series of events that will explore these challenges. The first webinar will offer perspectives that relate to educational and social implications of Big Data Analysis (BDA) and Machine Learning (ML), to consider how recent important digital technology developments in this area are having societal impact, and resulting educational challenges. To consider educational challenges in as many countries, situations, local contexts, and experiences as possible, IFIP experts and practitioners will contribute their ideas to support the development of this element of the ZD matrix

The webinar will start a dynamic process, collecting contributions and data, supplemented and updated over time (developing the ZD matrix as a living document). Outcomes will describe different challenges and development paths in different countries.

#### Intentions of this webinar

In this webinar, researchers, practitioners, and decision-makers will have their say through a panel discussion and online comment, exchanging experiences and views on respective thematic areas. All participants will have the opportunity to join the discussion via moderated chat and Twitter during the webinar, or comment on issues discussed in a forum afterwards.

A wide variety of individuals is asked to participate in this international process at various levels. Being a part of an international exchange of experience on these topics, those involved will offer and receive ideas and stimuli related to their policy, research or pedagogical practice, consider how to deal with possible consequences of future technological developments in their respective social environments and present their situational perspectives. The webinar will offer the opportunity to establish worldwide networks through Communities of Interest to enable continuing working together on this particular topic in the future.

#### Outcomes of Webinar 1

The benefit for society is to build collaboratively and make visible a wide landscape of the consequences of this technological development across a wide variety of social environments. Such a landscape can then be used as a map for different actors to think about their policy, to strategically orient their practices or research perspectives, enabling those in specific contextual situations to:

- Gain new educational, societal, theoretical, and technical insights about BDA and ML
- Consider analytical methods and tools being developed through BDA and ML, and their applications in different educational curricula
- Reflect on basic indispensable scientific and statistical foundations of those methods and tools, e.g. concerning important understandings about statistics, probability, uncertainty, incomplete data from different sources, data cleaning, biases, algorithms, or neural networks
- Participate in the design of specific elements of the ZD through synchronous contributions during the webinar (chat, tweets), asynchronous follow-up discussion (forums), or short contributions to the ZD matrix

- Share insights into various practical contexts and examples of implementation in different countries
- Build up networks of researchers, practitioners, decision-makers to promote joint work on thematic projects
- Develop a (co-operative) publication for a follow-up conference

### **What the webinar involves**

Prior to the webinar, basic literature will be distributed as a preparation and stimulus (1-2 papers), suggested further reading, and details of the ZD matrix matching the topic of the webinar will be available on the website.

The webinar will run for 90 minutes. The webinar will involve a panel of experts, who will be asked to talk for 10 minutes. The panellists include:

- Radhika Misquitta, Gateway School of Mumbai, India, a school teacher who will discuss uses and implications of developments in BDA and ML in an educational context
- Professor Anne Laurent, University of Montpellier, France, an expert in BDA and ML from TC12, who will focus on current and future developments and challenges of BDA and ML
- Gurusurthy Kasinathan, Director of IT for Change, India, a policy adviser who will discuss implications of developments in BDA and ML from an educational context perspective
- Professor Gülgün Kayakutlu, Istanbul Technical University, Turkey, an expert in ML from TC12, who will focus on current and future developments and challenges of ML
- Dr Andrew Fluck, University of Tasmania, Australia, an expert on BDA and ML in education from TC3, who will focus on current and future opportunities and challenges for education

The webinar will be supported by a moderator of the panel, and a co-moderator (to summarise and discuss questions or contributions through tweets and chats received during the webinar). You will be able to express your experiences and challenges, related to this theme. You will be encouraged to outline your context, the kind of activities in which you are involved, and the problems you face. The platform jit.si will be used for synchronous sessions during the webinar.

### **Registration**

To register for the webinar, please complete the [registration form](#).

The event is **free – there is no registration fee**.

However, please note that due to likely high interest in this event, online participation will be restricted to the first 100 registered participants. If you do not manage to register in the first 100, you will still have access to the recording, and will still be able to submit your comments and short contributions.

### **Event organisers**

Co-moderator: Prof Johannes Magenheimer

Co-moderator: Dr Mary Webb

Technical organisation: Prof Javier Osorio

Organisational planning: Dr Christophe Reffay

Organisational support: Prof Don Passey