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Technology-Driven Innovation and Transformation in  
Computer Science Higher Education

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## Abstract

Higher Education Institutions (HEI) around the world are challenged with *incremental* or *disruptive transformations* to the way that individuals, groups and organizations “*learn*” and the way to “*assess*” learning in 21st Century. The role of **Digital Technologies** in this challenging landscape of Higher Education is to allow for innovative experiences, processes, products, services, that would not be possible without the use of digital technologies.

To this end, **Educational Data Analytics** have attracted lots of attention recently, as the means for supporting data-driven evidence based educational decisions at various levels (from the classroom teaching and the curriculum development to university innovation planning and policy making) and from different stakeholders (classroom teachers, instructional designers, curriculum leaders, university leaders, policy makers) aiming towards better teaching and learning outcomes.

My presentation will cover the following topics:

- The Changing Landscape of Higher Education
- The Role of Digital Technologies

- Key Challenges for Technology-Enhanced Teaching, Learning and Assessment in Higher Education
- Research Strands
  - Methods and Tools for Open Access to Educational Resources and Practices
  - Context-aware Adaptive and Personalised (Mobile) Learning Systems
- Towards a Research-informed Technology-Driven Innovation and Transformation in Higher Education
  - Educational Data Analytics