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How to use UMI technology to promote STEM education

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Horizon 2020

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computer lechnolog institute & press



- **U** Ubiquitous computing
- M Mobile computing
 - I Internet of Things

...technologies changing our lives...





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2020 Project: UMI-Sci-Ed

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EU guidelines

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- Foster responsible research and innovation
- Align research with the values, needs and expectations of society
- Make science **attractive** to talented youth

UMI societal issues

- Are we **ready** for UMI technologies?
- Can society exploit UMI technologies for its own good?





UMI-SCI-ED



H2020: "Exploiting Ubiquitous Computing, Mobile Computing and the Internet of Things to Promote Science Education"

Objective

To develop an integrated, collective, experiential and open digital educational environment teachers and students, that will ...

- allow students understand, use, develop UMI applications and consider their societal implications
- improve digital and UMI skills of teachers
- stimulate students to envision a future career in UMI technologies
- enable (in long-term) a societal reform towards responsible research and innovation



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Tools and methods

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- Online **networking platform** for training, self-assessment, interaction and professional guidance
- **Repository** of educational material, tools and activities in UMI technologies
- Communities of Practice (CoPs) set up
- Innovative learning methods introduction and assessment
- Career guidance services





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H2020: "Exploiting Ubiquitous Computing, Mobile Computing and the Internet of Things to Promote Science Education"

Partners



Computer Technology Institute & Press "Diophantus" (coordinator) – Greece



Cork Institute of Technology – *Ireland*



- University of Pisa & **Preubit** Consortium Ubiquitous Technologies *Italy*
- University of Helsinki Finland





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Telecentre-Europe AISBL (now ALL DIGITAL) – *Belgium*



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Europe's society is based on knowledge

UMI technologies emerge as educational tools and learning objectives

UMI-Sci-Ed aims to bridge the gap between society and scientific community and enable citizen-centric policies in research and innovation



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DAISSy research group

The DAISSy research group was founded in 2001 by highly skilled and motivated researchers coming from various backgrounds.

The vision of the researchers of DAISSy group is to contribute to the realization of an advanced humane society by inventing technology that adapts and supports human needs and not the other way round!

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