

FuturICT 2.0

Large scale experiments and simulations for the second generation of FuturICT

Main area: ICT for Social Sciences Keywords: Societal Challenges, Anthropocene Challenges, Socio-Technical Systems, Simulations, Large Scale Experiments Duration: 36 months Total project funding: € 2.614.527

Abstract

To manage scarce resources and support endangered people, powerful global information systems need to be built, based on big data and artificial intelligence.

Digitization implies a massive structural change in the global economy, which will cause significant levels of unemployment unless economic systems are reformed. The potential misuse of Big Data and AI technologies cannot be ignored as it might generate a creeping authoritarianism and gradual erosion of the privacy rights and civil liberties of individuals. We need to make significant progress towards understanding and managing complex, global, interactive systems.

FuturICT 2.0 will bring together a large array of the best academic minds in fields such as social science, complexity science and computational science.

With jointly-supervised ICTSS projects, traditional workshops, exchanges, and meetings, the project will bring together the latest, bleeding-edge knowledge in areas such as big data, artificial intelligence, agent-based simulation, the Internet of Things, blockchain technology, and complexity science. This interdisciplinary approach will lay the theoretical and organizational foundations for the digital economy of the future.

FuturICT 2.0 will pursue disruptive innovation by harnessing bleeding-edge knowledge in fields such as the Internet of Things, blockchain technology and complexity science.

FuturICT 2.0 will harness emerging knowledge in order to address urgent global challenges, aiming to use disruptive innovation to tackle existential threats such as resource shortages, climate change, economic dislocation and technology-driven unemployment; develop a new, nuanced and multifaceted financial incentive system to promote a circular, sharing economy and achieve social goals collaboratively; adopt a decentralized and collaborative approach, involving methods such community-based decisionmaking, crowdsourcing and citizen science, to adapt to social needs and respond to unforeseen societal challenges.

Smart technology + smart citizens = the economy of the future.





Consortium

Mario Paolucci – Consiglio Nazionale delle Ricerche/Institute of Cognitive Sciences and Technologies – Italy – Funded by: MIUR (Coordinator)

Dirk Helbing – Swiss Federal Institute of Technology/GESS – Switzerland – Funded by: SNSF

Anna Carbone – Politecnico di Torino/Dipartimento di Scienza Applicata e Tecnologia – Italy – Funded by: MIUR

Guillaume Deffuant – Institut de Recherche Scientifique et Technique sur l'Environnement et l'Agriculture (IRSTEA) / Lab d'Ingénierie des Systèmes Complexes (LISC) – France – Funded by: ANR

Serge Guimond – Clermont-Auvergne Université / Laboratoire de Psychologie Sociale et Cognitive – France – Funded by: ANR

David Chavalarias – Centre d'Analyses et de Mathématiques Sociales – Institut des Systèmes Complexes – Ile de France – France – Funded by: ANR

Bruno Zuga – Riga Technical University /Distance Education Study Centre – Latvia – Funded by: LZA

Egils Ginters – Riga Technical University / Department of Modeling and Simulation – Latvia – Funded by: LZA

Alina Itu – Universitatea Transilvania din Braşov / Dept of Automation and Information Technology – Romania – Funded by : UEFISCDI

Jean-Charles Delvenne – Université Catholique de Louvain/Math Department – Belgium – Funded by : F.R.S.-FNRS

Tarmo Soomere – Tallinn University of Technology /Institute of Cybernetics – Estonia – Funded by: ETAg