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***Training for sustainable skills development***

The education and training of Data Scientists currently lacks a commonly accepted, harmonized instructional model that should reflect the whole lifecycle of data handling in modern, data driven research and the digital economy. This talk will present the EDISON Data Science Framework (EDSF) developed as a part of the EU funded EDISON project that is intended to create a foundation for the Data Science profession definition and work as a basis for the whole ecosystem of the skills management and capacity building involving academia, research, industry, and public sector.

The EDSF includes the following core components: Data Science Competence Framework (CF-DS), Data Science Body of Knowledge (DS-BoK), Data Science Model Curriculum (MC-DS), and Data Science Professional profiles (DSP profiles). The MC-DS is built based on CF-DS and DS-BoK, where Learning Outcomes are defined based on CF-DS competences and Learning Units are mapped to Knowledge Units in DS-BoK. In its own turn, Learning Units are defined based on the ACM Classification of Computer Science (CCS2012) and reflect typical courses naming used by universities in their current programmes.

The presentation will provide examples of the target use of the proposed EDSF for different components of the sustainable skills development and management: (a) defining Data Science and Data Analytics competences and skills required by organisation and building tailored staff development and re-/upskilling programmes; (b) designing effective Data Science curricula and training programmes adjusted to university resources and needs of stakeholder organizations; (c) designing job advertisement and assessing candidates competences and skills;

The presentation will also provide information about EDSF adoption and EDISON project cooperation with multiple projects and initiatives in Europe and worldwide, including Champion Universities community piloting Data Science programmes in Europe.