Agenda

Enlargement and Integration Workshop

"Digital Transformation, Data and AI in the Western Balkans"

Hotel DoubleTree by Hilton Skopje

9-11 December 2021

The European Commission's science and knowledge service

Joint Research Centre

Enlargement and Integration Workshop

"Digital Transformation, Data and AI in the Western Balkans"

https://ec.europa.eu/jrc/en/event/workshop/workshop-digital-transformation-data-and-ai-western-balkans

Hotel DoubleTree by Hilton Skopje. Skopje. North Macedonia.
09-11 December 2021

Registration link:
https://us02web.zoom.us/meeting/register/tZEtfu-gpz0vHtCd72H2GnjzxtniCFmgFh-g

Thursday, 9 December 2021

10:00-11:00   **Arrival at the venue - Hotel DoubleTree by Hilton Skopje**

                 Registration - Platinum conference room

11:00-12:00   **High-level opening session**

                 PhD. **Carlos TORRECILLA SALINAS**, Head of Unit at the European Commission Joint Research Centre

                 H.E. **Julian VASSALLO**, Deputy Head of EU Delegation to North Macedonia

                 PhD. **Jeton SHAQIRI**, Minister of Information society and administration, North Macedonia Government

                 Prof. Dr. **Nikola JANKULOVSKI,** Rector of University Ss Cyril and Methodius in Skopje

                 Mr. **Trajan ANGELOSKI**, President of Macedonian Chambers of Commerce

12:00-14:00   Welcome lunch

14:00-15:30   **Session 1 (10' for each presentation and 5' for questions)**

Title: Data and Artificial intelligence as drivers of digital transformation with examples from European Commission, FAO, World Bank. UN GGIM and University Ss Cyril and Methodius in Skopje.

Chair: Bekim FETAI

Alex KOTSEV – An EU approach to data sharing

Rumyana TONCHOVSKA – Geospatial Information and the role of Cadastre agencies in responding to the government policy drivers. FAO and World Bank support.

Blagoj DELIPETREV – Data-centric artificial intelligence

Tomaz PETEK – Digital transformation and Artificial Intelligence from regional and national perspective (UN GGIM Europe and Slovenia)

Vlado CETL, Danko MARKOVINOVIĆ – AI landscape in Croatia

15:30-16:00   Coffee break

16:00-17:30   **Session 2 (10' for each presentation and 5' for questions)**

Title: Data and Artificial Intelligence

Chair: Vlado CETL

Ivan CHORBEV, Vlatko NIKOLOVSKI, Dimitar TRAJANOV, Petre LAMESKI - Student Academic Performance Prediction-Regularly and During a Pandemic

Aleksandar JEVREMOVIC - Using A.I. to protect vulnerable Internet users at Human-Computer Interaction level

Andrej CEGLAR, Andrea TORETI - Climate risk assessments using large climate datasets: AI perspective

Petre LAMESKI, Eftim ZDRAVEVSKI, Andrea KULAKOV, Ivan CHORBEV, Vladimir TRAJKOVIK - Applications of Deep Learning Based Semantic Segmentation of Images

Bekim FETAJI, Majlinda FETAJI, Mirlinda EBIBI - Digital Transformation of Administration, Assessing their Digital Skills and Devising a Model for Improving the Proficiency

Ema VASILESKA, Ordan CHUKALIEV, Valentina GECEVSKA – Crop yield forecasting by machine learning in North Macedonia

Friday, 10 December 2021

09:00-10:30   **Session 3 (10' for each presentation and 5' for questions)**

Title: Data and geospatial intelligence

Chair: Ordan CHUKALIEV

Ivica MILEVSKI - Digital landslide susceptibility map of North Macedonia

Gordana KAPLAN - Rapid urbanization effect on Land Surface Temperature using Remote Sensing Technologies in Goggle Earth Engine

Slavoljub DRAGICEVIC, Ivan NOVKOVIC, Ivica MILEVSKI, Dejan FILIPOVIC, Milan RADOVIC, Aleksandar GLISIC - Toward the creation of the national cadastre of degraded areas in Serbia and North Macedonia

Aleksandar VALJAREVIC, Cristina POPOVICI - Transformation of traditional agriculture on digital in the Republic of Moldova using advanced techniques

Onur KAPLAN, Gordana KAPLAN - Digital transformation of post-earthquake damage assessment combining response spectrum concept and remote sensing data

Maria OWDII, **Sanja ZEKUSIC** - Development of NSDI in Republic of Moldova through EU Twinning Project and other Donors support

10:30-11:00   Coffee break

11:00-12:30   **Session 4 (15' for each presentation and 5' for questions)**

Title: Digital transformation of land administration institutions and NSDI

Chair: Rumyana TONCHOVSKA

Yosyp DOROSH, Shamil IBATULLIN, Andriy TARNOPOLSKYY, Andriy DOROSH, Avramchuk BOHDAN - Application of digital transformations of data and processes for modelling the structure of land use in the conditions of open land market in Ukraine

Borko DRASHKOVIC, Rumyana TONCHOVSKA, **Darko VUCETIC** - Digital transformation in Serbia – Geospatial data as a core instrument to transform a country

Tomislav CICELI - NSDI development in Croatia from interoperability perspective

Denis TABUCIC - Data integration & interoperability of public land administration services in Federation of Bosnia and Herzegovina

12:30-14:00   Lunch break

14:00-15:30 **Session 5 (10' for each presentation and 5' for questions)**

Title: Start-ups & companies in Artificial Intelligence and geospatial software

Chair: Igor NEDELKOVSKI

Svetlana KORDUMOVA – Pixyle.ai Visual AI for Fashion Retail

Dragan DIVJAK, Vlado CETL, Nikola VUČIĆ, Darko ŠIŠKO - Monitoring policy effectiveness with agent-based model approach

Gjorgji MADJAROV, Kristijan KOLEV, Aleksandar TRAJKOVSKI - Horizontally scalable lambda architecture for processing and analysing multivariate time-series data

Luka JOVICIC - Collaboration platform as a driver of the digital transformation

Hristijan GJORESKI, Simon STANKOSKI, Ivana KIPRIJANOVSKA, Martin GJORESKI - Emotional Artificial Intelligence using Face mounted Mask

Viktor MISOVSKI – 4 INFO

15:30-16:00 Coffee break

16:00-17:30 **Session 6 (10' for each presentation and 5' for questions)**

Title: Blockchain, Economy and Society

Chair: Dejan FILIPOVIC

Roberto REALE, Giovanni Paolo SELLITTO - Towards a technical architecture for societal Trust: developing the main building blocks

Atanasovski ATANASKO, Todor TOCEV - Most exciting disruptive technologies for accounting researchers and professionals

Art ALISHANI - Reviewing and Refining the Notion of the Real-Time Economy: Theoretical and Empirical Insights

Borce TRENOVSKI, **Ana TOMIKJ**, Gunter MERDZAN - What drives the digital transformation in the western Balkan banking sector? – The case of North Macedonia

Igor NEDELKOVSKI - Digital transformation for participatory urban planning

19:30 Social dinner - Hotel DoubleTree by Hilton Skopje

Saturday, 11 December 2021

09:00-10:30   **Session 7 (10' for each presentation and 5' for questions)**

Title: Digital transformation and Artificial intelligence in Education

Chair: Danko MARKOVINOVIĆ

Mishko DJIDROV, Blazo BOEV, Zoran ZDRAVEV - Goce Delcev University–Stip drives seamless transition to remote learning during pandemic

Tijana ILIĆ, Anja POLAJNAR, Mitja JERMOL, Tanja URBANČIČ - Fostering digital transformation by building capacities for open education

Bashkim IDRIZI – Implementing the geospatial technology for studying the natural and social subjects in primary schools in North Macedonia.

Festim HALILI - Programming Logic in Artificial Intelligence: a metamorphosis of M-mode to I-mode

Berat UJKANI, Betim DRENICA, Rinor KURTESHI, Muzafer SHALA - Development and implementation of speech-to-text technology using AI in Albanian language

10:30-11:00   Coffee break

11:00-12:30   **Session 8 (10' for each presentation and 5' for questions)**

Title: Data, digital transformation, and AI in public institutions

Chair: Bashkim IDRIZI

Stefan DEDOVIC - Challenges of Digital Government Transformation in Serbia

Etem GUNER - Digital transformation of Turkish public sector; Ontek information system

Igorche KARAFILOVSKI - Digitalization of Crisis Management System

Nikola NIKOLOV - National Population Register and Digital Identity

Vera SHIKO - The role of Artificial Intelligence to improve the urban living

12:30-14:00   Lunch break

14:00-15:00   **Wrap-up session / Conclusions / End of the workshop**

Chairs: Blagoj DELIPETREV, Ordan CHUKALIEV, Bashkim IDRIZI, Rumyana TONCHOVSKA, Vlado CETL