



2020-1-PL01-KA203-082197



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Erasmus+ project iBIGworld: Short-term Teacher's Training C2 has been conducted at the University of Nis in Serbia

During the period May 16 – May 20, 2022 Teacher's Training C2 was held. The training was organized by the University of Nis (UNi).

5 days 35 hours joint staff training was aimed to transfer and share the knowledge regarding the developed intellectual outputs in the Big Data area and prepare the trainers for pilot training. The agenda of the event can be found through the link <https://docs.google.com/document/d/1M0URP5od4wvHT4cs44Wr0pTlMCl6Kqx/edit?usp=sharing&oid=101046534126028994548&rtpof=true&sd=true>

University of Bielsko-Biala (UBB), University of Library Studies and Information Technologies (ULSIT) have sent four trainees each who are their staff members / lecturers in ICT area, database and machine learning as well as experienced in continuous professional development training. Three trainees from Taras Shevchenko University of Kyiv (TSNUK, Ukraine) have participated at the event online with the help of MS Teams.

The training has been conducted using the methodology already created and the training materials that have been developed as a result of Intellectual Outputs O1, O2, and O3 with the participation of members from partner universities. The teams were formed at the second project meeting M2 in Kyiv.

The format was organized as follows - morning sessions with conceptual work and presentations and afternoon workshop sessions where the 15 trainees were splitted into smaller groups to work on particular tasks, then all will get together again for presentation of their results and discussion.

The topics of the training included:

- DataBased with good practices BigData case (covering O1 - A1.1. Data Collection and A1.2. Analysis)
- How to analyze the Big Data Requirements and how to find the best solution to problems (covering O2 and O3)
- How to better prepare BigData specialists in the Data Lake ecosystem (outputs O3 and O4)
- How to help managers find the best way to use their BigData resources

Part of the training was a break-the-ice session of team-building exercise to make sure teams are formed efficiently and results are effective. All participants have done a personal test (myers- Briggs indicator) and got into teams based on the results.

There were also short game and creativity elements to encourage innovative thinking.

At the end of the training, the round table discussion and personal interviews have been conducted by UNi.

The sessions were held at the main building of the University of Nis.



Photo. Participants of C2 and C3 joint photo in University of Nis main building.



Photo. Senate hall of the main building of University of Nis, where the joint introductory session of C2 and C3 was held.



Photo. Prof. Dejan Rancic has started a joint C2 and C3 introductory session. His speech was devoted to the presentation of the University of Nis from the viewpoint of deep tradition in electronic engineering and computer science, involvement into international projects.



Photo. Prof. Vasyl Martsenyuk briefly presented the project's objectives, target groups, and the partners.

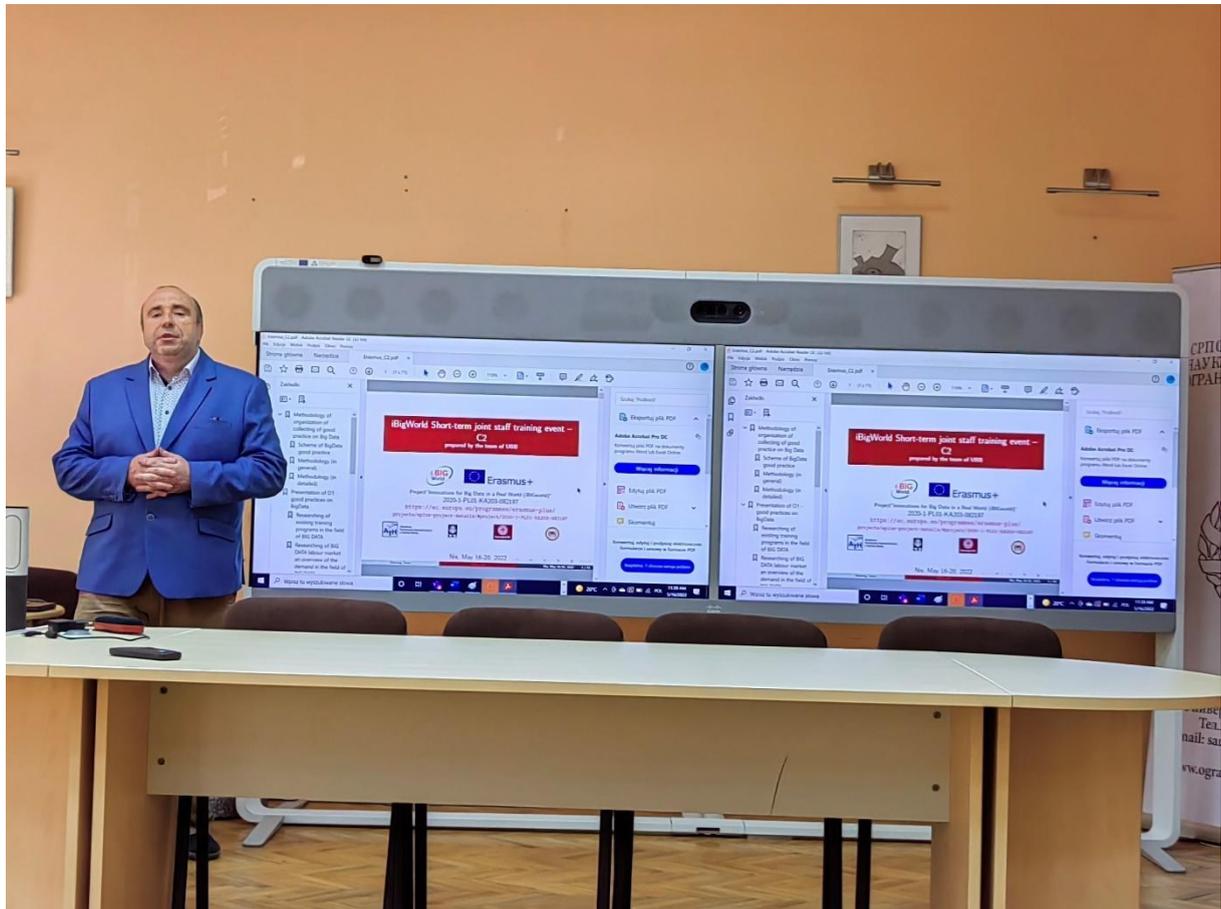
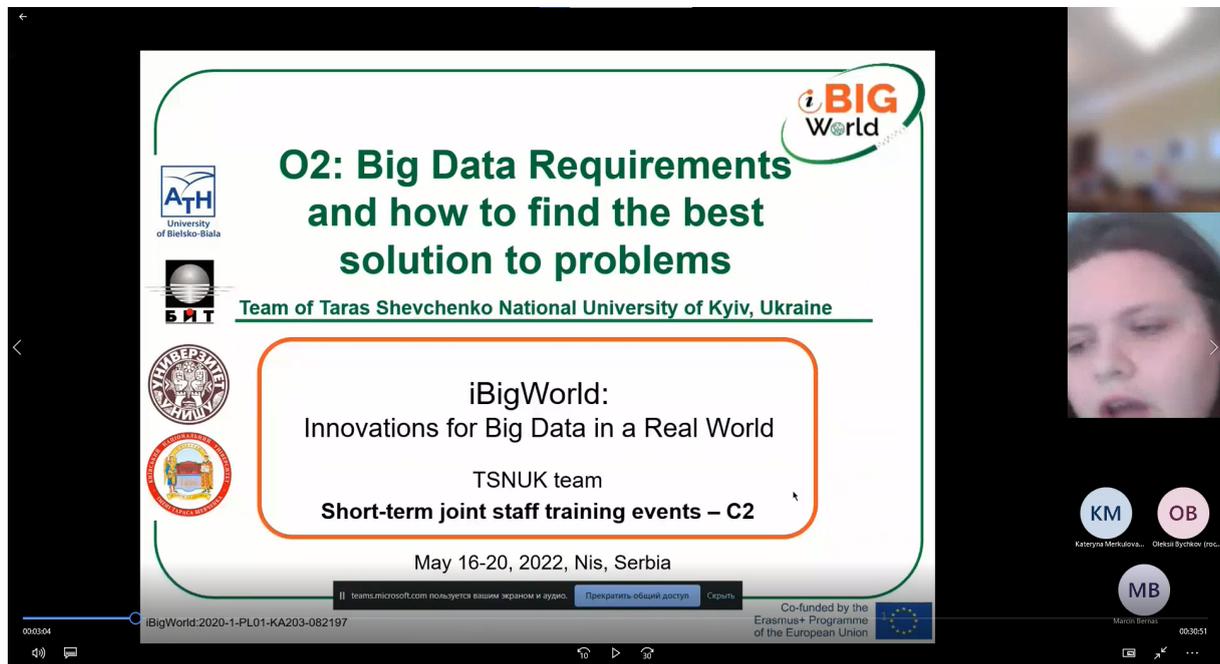




Photo. Prof. Vasyl Martsenyuk reported on the outcome O1.

<https://drive.google.com/file/d/1r4L7GiTBfcHIOOrRh7aw4HvTX4PfKq-dH/view?usp=sharing>

The report included the methodology for collecting good practices in Big Data, developing the questionnaires for target groups, and survey analysis.



O2: Big Data Requirements and how to find the best solution to problems

Team of Taras Shevchenko National University of Kyiv, Ukraine

iBigWorld:
Innovations for Big Data in a Real World

TSNUK team
Short-term joint staff training events – C2

May 16-20, 2022, Nis, Serbia

Co-funded by the Erasmus+ Programme of the European Union

Assoc. Prof. Kateryna Merkulova from TSNUK presented the results of outcome O2, paying attention to the requirements of Big Data good practice with regard to competencies and topics of the training course for data scientists. The results are entirely covered by ACM/IEEE standards for the curriculum in Data Science. The report was presented remotely with the help of MS Teams. The link to video recording is below.



Prof. Georgi Dimitrov from ULSIT presented the results of outcome O3.

https://docs.google.com/presentation/d/1bNfnub3pA_2y57fr88rzyb-jnu7eYkS7/edit?usp=sharing&oid=101046534126028994548&rtpof=true&sd=true

He has paid attention to the basic parts of the Big Data framework for HE. The main learning activities of the Big Data e-learning course with respect to curriculum topics were discussed.





Photo. Assoc. Prof. Vasil Totev presented the report devoted to the Data Lake ecosystem and the related challenges for Big Data specialists.

https://docs.google.com/presentation/d/1_oampolmmbXvX-Q3jl5Z2utov5tLHDw8/edit?usp=sharing&oid=101046534126028994548&rtpof=true&sd=true



Dr Aleksandra Klos-Witkowska from UBB presented the approaches which should be followed when developing the teacher's guideline. Namely, it should include objective, competencies, brief description of the content of the course, description of the activities of the training, and ways of assessment relative to the activities. The link to the presentation is below

https://docs.google.com/presentation/d/1nAYCxU3UQHx_Lt30Owlyyi0RCmsmhlhT/edit?usp=sharing&oid=101046534126028994548&rtpof=true&sd=true

The primary version of the guideline for the students was presented by Prof. Georgi Dimitrov (ULSIT). He has emphasized on the necessity to determine the requirements for the guideline enabling an easy and fast way for the students to get started with Big Data course training.

The version of the guideline for the business was described by Prof. Dragan Stojanovic (UNi). As a result of the discussion it was stated that this guideline should assist the grasping of the main course ideas by trainers from the business required to enforce the course with the help of real use cases as well as the experienced IT specialists.



Dr Marcin Bernas from UBB reported on the development of Big Data Smart Job Hub with the purpose of promoting business opportunities between Universities and business, including new Big Data-based internship programs. Being aware of the evolving employability requirements through the Smart BigData Job Hub, students will receive professional advice, support and experience, they will be able to build a well-oriented, in-line to the market needs specialization accessing increased employability opportunities. Students, being jointly directed by academics and industrial partners, will have the opportunity to respond to the rapid technology changes, through the outputs and objectives of this project. Through the updated curricula, students and graduates will be able to obtain state-of-the-art knowledge and skill background while accessing the Smart BigData Job Hub will make job inquiring easier and appropriate on their expertise. New graduates will be well prepared to address the challenges of a new job with high tech skills. The real and demanding needs in industry and market will be addressed more efficiently under the umbrella of the Smart BigData Job Hub resulting in the reduction of the time needed not only for a business to recruit its personnel but also to decrease the training periods, resulting in the productivity increase.

Smart BigData Job Hub will act as an open communication channel between job-seekers and enterprises. What is more, it will allow open access to the learning material produced and to



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the pool of job posts while society will be aware of the most acquired Big Data skills by employers. The Smart BigData Job Hub platform will allow access to end-users providing important information on skills needed, new job opportunities and new (employability) trends in the Big Data domain.

The most relevant result to be disseminated, mainstreamed and sustained is the open Smart BigData Job Hub. By delivering, disseminating and fully operating the Job Hub platform, iBIGworld facilitates access to information relevant to Big Data employability opportunities, creates closer links between business and community, eases transition to workforce and contributes to the creation of a sustainable learning community that identifies Big Data cutting-edge industrial needs enabling the re-forming of academic curricula.

Link to the presentation is below

https://docs.google.com/presentation/d/1d7PICj2-MZ9rsBGqkvBR-0ld3Alew_a/edit?usp=sharing&oid=101046534126028994548&rtpof=true&sd=true

Final session of the training was devoted to summarizing the outcomes of C2. The final document of the discussion has been developed and confirmed as the Conclusions of C2. It includes the main requirements and suggestions to be followed in order to complete the development of Big Data training course and guidelines successfully. The link to the document is below

<https://docs.google.com/document/d/1rPitkhGN86io1CQBImuv6YztmiU3mVF7/edit?usp=sharing&oid=101046534126028994548&rtpof=true&sd=true>

Most C2 sessions have been organized with the support of MS Teams. The links to the MS Teams recordings are below.

First day 1 -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EVtOezDDJL5EpGb2unrA65ABuqX736HXVbSTHTadgy19sQ?e=oHdKtQ

First day 2 -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EToLmv_xGRxPkqBVYqy1_rcBbsubVo8cv-3GqtOzy1rewg?e=Jhfkbb

Second day -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EWI73FxBK5OZKoaNbXDhXUaMBukDUA02bBITnN5IFTdXk2A?e=K65KgL



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Third day -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EZJCW71VqtVAv5v51IMYWAy0Beb3bvNXkHQm2dEXDyVupPA?e=Oo3eg6

Forth day 1 -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EeffpGx54xRHhSpkmzRvValBLnfUzMxKvXhO75jwcyA5Mg?e=psUskp

Forth day 2 -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EcmP5mZNzztFh6cuwl5bwBQB2JPhMol87swgcD3RAwJkKw?e=tpas6

Forth day 3 -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EV1jhGyyMkZHibAHfgWbEbIB6sFTKqi16F03gEKw7mBrEw?e=hM85mk

Forth day 4 -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/EQwzcfen5Oplv2d2GA7b6cIBIS6hnNNcDSMyNnocP Mrgg?e=wtd6nD

Fifth day -

https://athedu-my.sharepoint.com/:v:/g/personal/vmartsenyuk_live_ath_edu_pl/ESsyRLpDD-FDlfJzRUqTNIBOTHN4Npj1VzprZvDoloQtQ?e=7UvGww