

Brief report

Innovations in Digital Economy: IDE-2021

International Scientific Conference on innovations in digital economy: SPBPU IDE-2020 was held on October 22-23, 2020 at Peter the Great Saint Petersburg Polytechnic University (SPbPU). The conference was organized by Graduate school of industrial economics (GSIE) in collaboration with Faculty of Engineering Universitas Indonesia and Center for Sustainable Infrastructure Development (CSID) of Universitas Indonesia (UI).

The first conference was held in 2019 in a traditional format. IDE-2020 is held online, gathering over 150 participants from different countries such as **Russia, Indonesia, Germany, Romania, Italy, Czech Republic, Slovak Republic, Great Britain, Kazakhstan and Tajikistan.**

Within the framework of the conference, special issues were published:

[ACM CONFERENCE PROCEEDINGS 2020](#)

[IJTECH VOLUME 11, ISSUE 6 \(SE\) – 2020](#)

[IJTECH VOLUME 11, ISSUE 8 \(SE\) – 2020](#)

[CCIS SPRINGER \(SPECIAL ISSUE\) – 2020](#)

The opening ceremony was conducted by Director of the Institute of Industrial Management, Economics and Trade **Shchepinin Vladimir Engelevich**, Dean Faculty of Engineering Universitas Indonesia Dr. Ir. **Hendri Dwi Saptioratri Budiono**, Director of Center for Sustainable Infrastructure Development (CSID) Universitas Indonesia Dr. **Mohammed Ali Berawi**, Director of the Graduate School of Industrial Economics **Rodionov Dmitry Grigorievich**, associate professor at GSIE **Rudskaya Irina Andreevna**, associate professor at GSIE **Kudryavtseva Tatiana Jurievna**.

Co-chairs of the conference thanked the participants for taking interest in the event and noted the high quality of papers submitted to the program committee. Publishing of a special issue of proceedings volume by ACM and a special issue of the International Journal of Technology (IJTech) is planned based on the results of the conference. In conclusion, chairs of the conference noted the importance of collaboration between universities because “... If you want to walk fast, walk alone. If you want to walk far, walk together ...”.



On the first day of the conference, at the plenary meeting, highly interesting presentations were conducted by Senior Lecturer at Cass Business School **Dr. Dirk Nitzsche** a scientific team consisting of associate professor at GSIE Kudryavtseva Tatiana Jurievna and research assistant at GSIE Angi Skhvediani. Dr. Dirk Nitzsche dedicated his report to the prospects of the development of the Fintech industry, focusing on an overview of the opportunities, threats and the effectiveness of the implementation of modern technologies in the financial sector. Tatiana Kudryavtseva and Angi Skhvediani presented the case of how modern technologies were implemented in order to improve the master's program "Digital economy and business analytics" at Graduate school of industrial economics. Specifically, the authors showed a way to identify the skill structure required in the market and compare it with the skill structure provided in the master's program. As a result, the categories of skills for which the largest gaps were observed were identified, which led to implementation of changes in the structure and content of the master's program in conjunction with ICST in order to improve its compliance with the requirements of the current labor market.

The speeches of the key speakers really caught the attention of the conference participants, as they were devoted to the current trends in the development of the digital economy.

At the end of the plenary session main editor of the International journal of Technology Dr. Mohammed Ali Berawi and commissioning editor Dr. Nyoman Suwartha gave a special lecture on "Writing and Publishing Scientific Articles" focusing on issues such as preparation, writing and publication of articles in journals. The authors paid special attention to the success factors, namely: self-discipline in writing articles, collaboration with other scientists, following the guidelines of journals, positioning research in the body of existing literature, constructive communication with reviewers.

Title



- Write an **accurate, simple, and attractive** title
- Write in a **concise, specific and informative** sentences
- It should **capture the fundamental** nature of the experiments and findings
- Make sure there is **keywords** in the title
- **Avoid general title, long sentences, phrase “Study” “Using” etc.**

The first day of the conference ended with a round table "End-to-end technologies in industry" organized by the "Industrial systems of streaming data processing" Laboratory of the NTI SPbPU Center with the participation of its industrial and technological partners.

Within the framework of the event, cases on software and hardware developments with the use of computer vision and digital modeling technologies, as well as various aspects of their implementation in the practical activities of manufacturing companies, were showcased. Each project was presented by both the developers from the laboratory and representatives of customers and partners.

In particular, the following topics were covered within the framework of the round table:

- "Smart Mobile Enforcement Systems. Intelligent mobile systems for traffic control" (Filipp Gennadevich Ivanov, Deputy Director for Research and Development, Olvia LLC);
- "The use of radar and optical technologies for automatic determination of the spatial position of the violation photofixation complex" (Yaroslav Xutornoj, Engineer of «Industrial Systems for Streaming Data Processing» Laboratory of the SPbPU NTI Center);
- "Development of a hardware and software complex for automating the assessment of bitumen coverage of crushed stone of various nature" (Aleksandr Boldyrev, Deputy General Director for Finance and Development of CJSC "Amdor" and Anna Ovsyannikova, Leading Engineer of «Industrial Systems for Streaming Data Processing» Laboratory of the SPbPU NTI Center);
- "Application of BIM-technologies for the design of sewage treatment facilities" (Pavel Schastny, BIM-technologies specialist of the «Industrial Systems for Streaming Data Processing» Laboratory of the SPbPU NTI Center and Elizaveta Savchenko, BIM-manager of JSC "NPO Alliance Electro").

Вы просматриваете экран Анна Осанниковича Настройки просмотра

Ксения Кочкина Angi Skhvediani Александр Бол... Елизавета Савч...

Филипп Иванов Ярослав Хуторной


АМДОР **ПОЛИТЕХ** Санкт-Петербургский политехнический университет Петра Великого **ПОЛИТЕХ** Центр поведенческих технологий и инноваций Новые производственные технологии **ПОЛИТЕХ** Инновационные производственные системы Политехнического университета

Определение качества укладываемого асфальта

Для определения качества асфальта используют различные методики:

- изменение динамической вязкости битума;
- водостойкость при длительном водонасыщении;
- морозостойкость;
- устойчивость к колееобразованию;
- ...

➔ **дорого и трудоёмко**



- Определение адгезии (сцепления) - наиболее массовая и популярная методика, так как не требует наличия дорогого лабораторного оборудования.
- Наличие адгезии – необходимое условие долговечности асфальта.

Участники Чат Демонстрация экрана Запись Реакция

On the second day of the conference, a round table discussion was held to explore the topic of cross-border cooperation between the regions of St. Petersburg, Leningrad Oblast and South-Eastern Finland. The project "Inclusive cross-border business networking of tomorrow" was launched by Lappeenranta University of Technology as a leading partner, Graduate school of industrial economics (GSIE) of Peter the Great Saint Petersburg Polytechnic University (SPbPU), Saint-Petersburg Chamber of Commerce and Industry, SaimaanVirta, Etelä-Karjalan Yrittäjät ry.

The round table discussion revolved around the results of the first stage of the project devoted to the analysis of barriers and incentives for companies to participate in cross-border cooperation projects.

In particular, Maya Sergeevna Leukhina made a presentation on "Analysis of cross-border cooperation factors aimed at increasing the competitiveness of small and medium-sized enterprises in St. Petersburg". The report was devoted to the factors identified through the survey and other key aspects of the implementation of cross-border cooperation between small and medium-sized businesses. The results of a comparative analysis of the competitiveness of enterprises were also presented, which reflected the positive relationship between international cooperation of small and medium-sized enterprises and the level of competitiveness of these enterprises.

Schneider Alexandra, a student of Graduate school of industrial economics (GSIE), SPbPU, presented her report on the topic "Cross-border cooperation as a factor in increasing the efficiency of small and medium-sized businesses in St. Petersburg." The work investigated the factors that facilitate or hinder the establishment of sustainable cooperation between neighboring companies. Also, an assessment of the financial performance of SMEs in St. Petersburg and an assessment of the impact of cross-border cooperation on said performance was carried out. As a result, it was concluded that cross-border cooperation has a positive impact on the liquidity, financial stability and profitability of small and medium-sized enterprises in the region.

Next was the presentation "Analysis and identification of the skill structure in the labor market" from Angi Skhvediani and Tatiana Kudryavtseva. The authors presented the main approaches to identifying the structure

of skills required in the market for individual professions, approaches to clustering skills and identifying close groups of skills, approaches to identifying gaps between the structure of skills required in the market and the skill structure of modern applicants.

Also, Anna Dmitrievna Korsukova (certified coach of the Russian Export Center) made a presentation on the topic “Assessment of the results of the study on cross-border cooperation barriers”. Anna Dmitrievna confirmed that the results obtained by the project participants as part of the first stage of the study are relevant and consistent with real-world practice. As a part of the report she put forward a number of proposals related to the identification of “hidden” experts and supplemented the list of barriers and incentives for cross-border cooperation.



Further, the project participants discussed the second stage of its implementation, which is devoted to identifying the structure of the skills of “hidden” experts, which are necessary for successful cross-border cooperation.

The discussion was attended by Igor Dyukov (PhD, professor at Lappeenranta University of Technology), Anton Tikhomirov (candidate of economic sciences, associate professor, associate professor at GSIE SPbPU), Tatyana Kudryavtseva (doctor of economic sciences, associate professor, professor at GSIE SPbPU), Ekaterina Lebedeva (Vice President of the St. Petersburg Chamber of Commerce and Industry), Anna Nadik (St. Petersburg Chamber of Commerce and Industry), Angi Skhvediani (assistant at GSIE SPbPU), Valentina Kravchenko (assistant at GSIE SPbPU), Maya Leukhina (student of master’s program “Quantitative Finance” at GSIE SPbPU), Alexandra Schneider (student of master’s program “Bioeconomics” at GSIE SPbPU).

Thus, during the two days, the participants of the conference made reports at 6 thematic sections, conducted a lively scientific discussion at 2 round tables. All this together created a truly special, productive and positive atmosphere for the event, which is on its way to become a mainstay autumn tradition for the Graduate school of industrial economics. The organizers hope that this scientific conference will continue to develop and that over time it will attract even more new participants from various universities and countries.