



THE WORLD RATING OF UNIVERSITIES IN THE INTERNET

The efficient stuffing of university web-sites with recourses is one of the factors that determine the



forming of the modern market of educational services. The site accessible to a great number of people is the image of the university in the world Internet space.

The research group Cybermetics Lab publishes the Webometrics rating twice a year. The results of the regular January rating 2013 were published on the official site of Webometrics on February 7 2013.

21250 universities of the world were presented in the rating.

Ukrainian universities significantly improved their ground compared to last year. The leader of the 2012 national rating "Top-200

Ukraine" of the universities of the III and IV accreditation levels the National Technical University of Ukraine "Kiev Polytechnic Institute" occupies the 510th position in the Webometrics rating having improved its ground on 200 points for the second time. T. Shevchenko Kiev National University also showed better results on several hundred points and occupies the 704th position.

Donetsk National Technical University – 1116th position, V.N. Karazin Kharkov National University- 1138th position, the National University "Lvovskaya Polytechnica" – 1242nd position are among first five universities of Ukraine.

At present practically all universities have their web-sites. But, according to the world ratings, to raise the quality of the Internet resources is still a topical task. The analysis of the web-site ratings is the mechanism that reveals weak points and shows the ways of improving of the Internet marketing policy of the university.

FRENCH-UKRAINIAN COLLABORATION



DonNTU and the universities of Cergy-Pontoise Versailles have been collaborating for 5 years.



UNIVERSITÉ DE VERSAILLES SAINT-QUENTIN-EN-WÉLINES

The program "Dnieper" started in 2012. Research work, namely the development of the algorithms of control of humanoid robots and handicap

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devices were paid special attention to. The bipedal humanoid robot Robian 2, the robotized blocks Catana, Koala and others, electromechanical and hand-drive wheel-chairs were used for the research done simultaneously in the laboratories of LISV (the University of Versailles), ETIS (the University of Cergy-Pontoise) and that of "Special Electric Drives" of the EAII Department of DonNTU).

The academics and researchers of the laboratories as well as post-graduate, Master and graduate students were involved in the work. The post-graduate students A. Melnik and V. Khomenko, representing DonNTU, were the main executors of the scientific developments. The Master students A. Pugach, A. Nikitin, E. Snegina gained an active assistance as they were spending their diploma work pre-defense period in the laboratory of ETIS (the University of Cergy-Pontoise). The results were reported at the workshops in the laboratory of LISV (the University of Versailles) and at international conferences.

The second research area – the interaction of the humanoid robot with the similar to itself (a human being) was implemented in the frameworks of the program "Dnieper", with the issues of the rhythmical physical force being also examined. The process of hand shaking, for example, is known to be conditionally split into three phases. At the first phase the position of the object with which the robot's hand is to be close is assessed. For this special sensors which are in the robot's gripper are to be applied. The frequency of the possible vibrations of the pair robot's hand –human being's hand can be in rather wide ranges- from some

tenths of Hz to 1, maximum 2-3 Hz. The interaction frequency depends to a considerable degree on humanbeing's state (calm, relaxed, stressed out). These parameters were built into the development of the theory of the rhythmical physical interaction of the humanoid robot with the similar to itself -a human-being. The post-graduate student A. Melnik did this part of research work. This concept was further on developed during making of the simulation block and research of dynamics of the behavior of the contact pair on models. The results of model tests and real simulations showed good convergence and reliability of the positions built into the theoretical basis. The researchers of the ETIS laboratory were interested in them and recommended them for further presentation at international forums and conferences.

The research on the program "Dnieper" was successfully finished in 2012. The final report was sent to Gosinformnauka. The program linked the creative and scientific personnel of the laboratories of the two countries to solve very important and topical problems of robotics. Both parties expressed their desire to continue the work with the application of the latest robotic equipment of the partner universities.

The first stage of the **program "MASTER"** is over. The last chords sounded in December 2012-January 2013. The Master's degree papers to get the diploma of MASTER-SIC (Master-researcher) of the



University of Cergy-Pontoise were defended at the laboratories ETIS (France) and Special Electric Drives of the EAII Department (Ukraine).

The Master students A. Nikitin, A. Pugach, and E. Snegina spending their diploma work pre-defense period in the ETIS laboratory of the University of Cergy-Pontoise scored big success and got the diplomas of MASTER-SIC. The students V. Dolmatov, M. Zaitsev and D. Ipanov should finish their planned research and present the diploma works to the commission at the EAII Department.

The students A. Pugach and E. Snegina defended their diploma works to get the degree of the Ukrainian university on January 16th, the others- on January 17th. All got excellent marks.

Our partner from the University of Cergy-Pontoise, Associate Professor, HDR Patrick Enaff arrived in Donetsk on January 15th to be present at the defense procedure. He took an active part in the meetings of two State Examination Boards and at the ceremony of presentation of the Master's diplomas. The Rector of DonNTU Prof. Minaev mentioned during the ceremony that the 3 certificates of the University of Cergy-Pontoise will be replaced by the Master diplomas in March-April 2013.

The Ukrainian Master's diplomas of mechanical engineer (2), electrical engineer (2) and electromechanical engineer (4) were obtained by 8 students of the French Engineering Faculty.

During his staying at DonNTU P. Enaff corrected the final version of the dissertation of V. Khomenko, coordinated the plan of the work of the post-graduate student A. Melnik, discussed the issues of in-depth training of Master students of DonNTU in the laboratory ETIS of the University of Cergy-Pontoise in February 2013, details of on-line delivery of some parts of courses on Mathematics, Physics, Industrial Electronics and Control Theory in French from the laboratory ETIS, France. The list of disciplines, modules and terms of lecture delivery will be determined after the coordination with the course supervisors.



INCORPORATED TRAINING IN POLAND

The student of Mining and Geological Faculty of DonNTU A Kaduka had his incorporated training at the Faculty of Gas-and-Oil Well Drilling of Stanislav Stashitsa Mining and Metallurgical Academy, Krakow in the frameworks of the agreement between the two institutions.

Stanislav Stashitsa Mining and Metallurgical Academy (AGH Scientific and Technical University) is one of the oldest and well-known technical universities in Poland.

The University offers a wide range of prestigious and modern specialities which are in demand both in Europe and the world. The aim of the university is to train highly-qualified specialists on 33 areas and more than 170 specialities.

The financing of the incorporated possible due to the scholarship of Biura Wyksztalcenia I Wymiany Department of the Ministry of Education of included training on 12 disciplines. At the end passed his exams and final semester tests. His incorporated training was completely close friendship contacts with the students of at.

DISTANCE LEARNING AT POLISH

The students of the Polish Engineering



got an offer to course at Poznan



training of A. Kaduka was Uznawalonsci Miedzynarzodowej – the Poland. The program of the semester the student program of the fulfilled. He also made the group he was studying

UNIVERSITY

Faculty of DonNTU (PEF) have the distance learning Economic University

(Poland). The offer was sent by Elena Shelest, a graduate of PEF, ex-Assistant Professor of the Department of Personnel Administration and a current postgraduate student of the Economic University of Poznan. She is the ideologist and organizer of the project patronized by the Fund "Education for Democracy". The course had been designed for the intensive distance learning (e-learning) of Polish students or for those with excellent proficiency in the Polish language. The first course block "Successful Behavior at the Labour Market" is very helpful for the students of any speciality as it is intended for young people looking for their first job. The block covered lectures, cases and tests on the behavior during interviews, preparation of the application documents, psychological training of a person, self-presentation in front of the employer etc.

The students were very interested in the possibility to have the thematic course at the foreign

university without leaving Donetsk. About thirty graduate students that had been studying Polish for two-four years registered for the distance course. However, there were some first-year students willing to test their fortune on the way to the certificate despite the fact that they had been studying Polish a little bit more than six months. They had to overcome some extra difficulties and not all of them completed the course and passed the tests. 16 people will get the certificates (it's a little bit more than a half of those who started their distance training on the course). Their score was 75-96 out of 100. They all did very well, but we would like to mention the first year student Victoria Gayuk. It was a very difficult course for her but she reached the goal. The students will get their certificates soon; meanwhile Elena Shelest informed that the second block of the distance learning course was not far off.



THE FULBRIGHT FUND SCHOLARSHIP



The Assistant Professor of the Department of Computer Engineering S. Y. Gogolenko got the scholarship of the Fulbright Fund to have his ten month's scientific in-depth training at California University, Davis, the USA. The scholarship is the result of the selection procedure organized by the Fund. It is a very important sign

of recognition of the scientific school of our university on mathematical modeling (Prof. L. P. Feldman, Prof. V. A. Svyatny) and the next step to broadening our contacts with American scientists.

INTERNATIONAL COLLABORATION OF THE DEPARTMENT OF MONITORING COMPUTER SYSTEMS



There was a working meeting at the Department of Monitoring Computer Systems on January 30th. Mr. Guray Kaprinaem, the Technical Director of the international company ECM ECO Monitoring (Environmental & Process Monitoring Instrumentation - <u>http://ecomonitoring.com</u>) took part in it.

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The following issues were covered by the meeting: the perspectives of introduction of new generation automated

monitoring systems in Ukraine; adaptation of the module systems of control of the polluted atmospheric air produced by the company Aeroqual; technical integration of the monitoring stations for the companies of the DTEK group; collaboration in server maintenance of the atmospheric air monitoring stations.



In 2012 the Department of Monitoring Computer Systems prepared and published two National Reports of Ukraine for the European Environmental Agency (EEA) patronized by the European Union:

"Information Exchange: Ecological Information Joint System (SEIS)" (http://enpi-seis.ew.eea.europa.eu/project-activities/country-folders/ukraine/enpi-seis_country_report_ukraine_final.pdf).

"Pollutant Emissions Inventory and Air Quality Monitoring in Ukraine». AIR-Q-GOV Report Supplement: MWH SA, La Hulpe, Belgium. 2012. (<u>http://www.airgovernance.eu/admin/editor/uploads/files/Third%20Progress%20</u> Report%20covering%20the%20period%20January-June%202012.pdf) (<u>http://wikience.donntu.edu.ua/averin/averin_rodriges_mwh_2012.pdf</u>)

The Newsletter is prepared by the International Office of DonNTU.

Should you have any questions or offers as to the publication material, please address us at: 1^{st} building of Donetsk National Technical University, office 220; tel.: (062) 301 – 08 – 25; (062) 337 – 32 – 66; fax: (062) 304 – 12 – 78; web-site: <u>http://iic.dgtu.donetsk.ua/</u>; e-mail: <u>ovs@pop.dgtu.donetsk.ua</u>