

DEPARTMENT OF CYBERNETICS AND ARTIFICIAL INTELLIGENCE

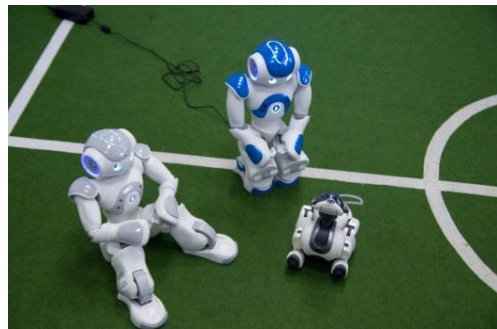
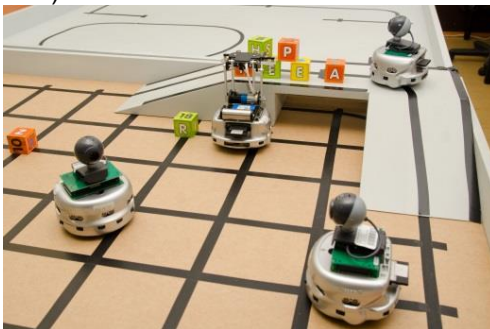
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1 DEPARTMENT'S PROFILE

The Department of Cybernetics and Artificial Intelligence (DCAI) is responsible for education in two study programs: Intelligent Systems, and Business Information Systems at all three levels of university education (bachelor, master and PhD).



The main research topics at the DCAI are intelligent and cognitive robotics with the aim to develop learnable collaborative robot systems, interactive intelligent environment able to perceive and recognise activities and events, cloud computation, data science, knowledge management, semantic technologies, intelligent decision support systems, processing and analysis of the large volume and continuous data in real-time, Internet of things, Industry 4.0, modern control theory and fault tolerant control design, cyber-physical systems, under-actuated and actuated nonlinear dynamical systems, flexible manufacturing systems, collective intelligence and computer vision.

The predecessor of the Department was founded in 1964. Department of

Cybernetics and Artificial Intelligence was adapted in 1989. Currently it has 26 staff members and 26 internal PhD. students. There are 3 research centers within the department: Center of Intelligent Technologies (<http://www.cloudai.sk/>), Center of Applied Cybernetics (<http://kkui.fei.tuke.sk/info/cak>) and Center of Business Information Systems (<http://kkui.fei.tuke.sk/chi/>). The Department is involved in a number of research and educational projects (see below).

2 STAFF

Professors: prof. Ing. Dušan Krokavec, CSc.
prof. RNDr. Eva Ocelíková, CSc.
prof. Ing. Ján Paralič, PhD.
prof. Ing. Tomáš Sabol, CSc.
prof. Ing. Ján Sarnovský, CSc.
prof. Ing. Peter Sinčák, CSc.
prof. Ing. Iveta Zolotová, CSc.

Associate Professors: doc. Ing. Peter Butka, PhD.
doc. Ing. Anna Filasová, CSc.
doc. Ing. Anna Jadlovská, PhD.
doc. Ing. Ján Jadlovský, CSc.
doc. Ing. Marián Mach, CSc.
doc. Ing. Kristína Machová, CSc.

Assistant Professors: Ing. František Babič, PhD.
Ing. Peter Bednár, PhD.
Ing. Vladimír Gašpar, PhD.
Ing. Slávka Jadlovská, PhD.
Ing. Rudolf Jakša, PhD.
Ing. Peter Papcun, PhD.
Ing. Martin Sarnovský, PhD.
Dr. Ing. Ján Vaščák
Ing. Mária Virčíková, PhD.

Researchers: Ing. Marek Bundzel, PhD.
Ing. Gabriel Tutoky, PhD.

Technical Staff: Tatiana Baňasová
Renáta Giannusis

Ph.D. Students (internal):

1^{st.} Ing. Norbert Ferenčík
Ing. Erik Kajáti
Ing. Patrik Sabol

2^{nd.} Ing. Zuzana Vantová
Ing. Martin Čertický
Ing. Jozef Mocnej
Ing. Anna Novická
Ing. Miroslav Smatana
Ing. Peter Takáč
Ing. Michal Vadovský
Ing. Dominik Vošček
Ing. Michal Varga

3 rd .	Ing. Ján Čabala Ing. Jakub Hvizdoš Ing. Martin Mikula Ing. Martin Miškuf Ing. Miroslava Muchová Ing. Jaroslav Ondo
4 th .	Ing. Matej Oravec Ing. Tomáš Cádrik Ing. Michal Kopčík Ing. Tomáš Lojka Ing. Gergely Magyar Ing. Ladislav Nyulászi
5 th .	Ing. Michal Puheim Ing. Martina Tarhaničová

3 RESEARCH TEAMS

- Data science - primarily focused on methods and models for analysis of different types of data and models and methods for the processing and analysis of large volumes of data and continuous flows of data in real-time. (<http://kkui.feit.tuke.sk/chi/?path=english>)
- Fault-tolerant and Robust Control - primarily focused on innovative control design techniques exploiting convex optimization problems with constraints and disturbance suppression, models and algorithms for processing and synthesis of robust control of dynamical systems working under system model uncertainties and severe failure conditions and design, implementation and experimental verification of methods guarantying system fault tolerance and reconfiguration structures of control.
- Modern Control Techniques and Industrial Informatics - primarily focused on methods and developing resources for hybrid modeling and control of cyber-physical systems, new methods and algorithms for modeling, identification, control and diagnostics of under-actuated and actuated nonlinear dynamical systems, research and development of flexible manufacturing systems, automated and robotic production lines and the design of diagnostic systems focused on diagnostics of vibration and chatter for the cyber systems. (<http://kyb.feit.tuke.sk/laben/>)
- Intelligent Cybernetics Systems - primarily focused on machine learning algorithms, collective intelligence, and optimization, and computer vision, intelligent and cognitive robotics, smart living, intelligent space topics, sensors nets, intelligent gateways and processing with IoT/loE and cloud technologies in smart industry, smart manufacturing control systems, and multiagent robotics systems. (<http://cybereducentre.feit.tuke.sk/>)
- Intelligent Technologies and Systems - primarily focused on intelligent robotics (to develop learnable collaborative robot systems), interactive intelligent environment able to perceive and recognise activities or events, and cloud computation (AI bricks – modular services providing functionality of selected artificial intelligence methods). (<http://www.cloudai.sk/index.php/en/events/>)

4 TEACHING

4.1 Undergraduate Study (Bc.)

Subject	Semester	Lectures/exercises (hours per week)	Name of lecturer
Basics of Intelligent Systems	2 nd	2/2	Sinčák
Introduction to Automatic Control	2 nd	2/2	Jadlovská A., Jadlovský
Introduction to Business Informatics	2 nd	2/2	Paralič
Industry 4.0.	3 rd	2/2	Zolotová Papcun
Simulation Systems	3 rd	2/2	Jadlovská A., Jadlovská S.
Simulation systems in Business Information Systems	3 rd	2/2	Butka
Project Management	3 rd ,5 th	2/2	Babič
Knowledge-Based Systems	3 rd ,5 th	2/2	Machová
Single chip computers	3 rd	2/2	Jadlovský
Subject	Semester	Lectures/exercises (hours per week)	Name of lecturer
Information Systems Analysis and Design	4 th	2/2	Babič, Sarnovský M.
Control and Visualization Systems	4 th ,5 th	2/2	Zolotová Papcun
Intelligent Decision Making Systems	4 rd ,5 th	2/2	Mach
Control System Components	3 rd ,4 rd	2/2	Vaščák
Web Technologies	4 th ,6 th	2/2	Bednár
Control of Technological Processes	4 th	2/2	Jadlovský
Scheduling and Logistics	4 th	2/2	Paralič Butka
Optimal Control of Hybrid Systems	5 th	2/2	Jadlovská A.
Intelligent Robotics	5 th	2/2	Bundzel
Business Analytics	5 th	2/2	Butka
Neural Networks	5 th	2/2	Sinčák
Models and control of industrial processes (MRPP)	5 th	2/2	Filasová, Jadlovská S.
Computer Systems in Control	5 th	2/2	Jadlovský
Optimisation in Economic Processes	5 th	2/2	Filasová
Business Informatics in practice	6 th	2/2	Babič
Service Robotics	6 th	2/2	Virčíková
IT Management	5 th ,6 th	2/2	Sarnovský M.
Selected topics in cybernetics II	6 th	2/2	Sarnovský J.

4.2 Graduate Study (Ing.)

Subject	Semester	Lectures/exercises (hours per week)	Name of lecturer
Discret Control of Dynamic Systems	1 st	2/2	Filasová
Computer Vision	1 st	2/2	Bundzel
Humanoid Technologies	1 st ,3 rd	2/2	Sinčák Virčíková
Computer Systems in Control	1 st	2/2	Jadlovský
Architectures of Industrial Information Systems	1 st	2/2	Zolotová

Engineering Econometrics	1 st	2/2	Krokavec
Knowledge Discovery	1 st	2/2	Paralič, J.
Machine Learning	1 st	2/2	Machová
Heuristic Optimization Processes	1 st	2/2	Mach
Control and Artificial Intelligence	2 nd	2/2	Jadlovská
Technologies for Big Data Processing	2 nd	2/2	Bednár, Sarnovský M.
Evolutionary Algorithms	2 nd	2/2	Mach
Distributed Control Systems	2 nd	2/2	Jadlovský
Decision making and complexity		2/2	Gašpar
Hybrid Computational Intelligence	2 nd	2/2	Vaščák
Control and Visualisation Systems	2 nd	2/2	Zolotová Papcun
Knowledge Management	3 rd	2/2	Paralič, J.
Management Information Systems	3 rd	2/2	Jadlovský
Diagnostics and Robust Control	3 rd	2/2	Filasová
Advanced methods of computer vision	3 rd	2/2	Bundzel
Subject	Semester	Lectures/exercises (hours per week)	Name of lecturer
Cognitive Robotics	3 rd	2/2	Bundzel
Semantic and Social Web	3 rd	2/2	Machová
Languages for Intelligent Systems	3 rd	2/2	Mach
Interactive Systems	3 rd	2/2	Sinčák
New Trends in Business Information Systems	4 th	2/2	Paralič

5 RESEARCH AND EDUCATIONAL PROJECTS

- **Semantic keyword-based search on structured data sources (KEYSTONE)**, COST Action IC-1302, European Cooperation in Science and Technology, duration: 2014 – 2017, members from our department: Peter Butka (Management Committee member for Slovakia), Peter Bednár, Martin Sarnovský, Ján Paralič
- **Autonomous Control for a Reliable Internet of Services (ACROSS)**, COST Action IC-1304, European Cooperation in Science and Technology, duration: 2013 – 2016, members from our department: Peter Bednár (Management Committee member for Slovakia)
- **European Network for cost containment and improved quality of health care**, COST Action CA15222, European Cooperation in Science and Technology, duration: 2016 – 2020, members from our department: František Babič (Management Committee member for Slovakia)
- **ALICE Experiment at the LHC at CERN – study of strongly interacting matter under extreme conditions**, International project of basic research, duration: 2016 – 2020, members from our department: Ján Jadlovský (Team Leader for TUKE), Slávka Jadlovská (Deputy Team Leader), Anna Jadlovská, Jakub Čerkala, Michal Kopčík, Matej Oravec, Ján Čabala, Michal Varga, Dominik Vošček
- **Resident core of active reconfigurable control systems**, Scientific Grant Agency project No. 1/0348/14, duration: 2014 – 2016, members: Dušan Krokavec (project leader), Filasová Anna

- **Methods and models for analysis of data streams**, Scientific Grant Agency project No. 1/0493/16, duration: 2016 – 2019, members: Ján Paralič (project leader), Martin Sarnovský, Peter Bednár, František Babič, Peter Butka, Kristína Machová, Vladimír Gašpar, Michal Vadovský, Miroslav Smatana, Miroslava Muchová, Martin Mikula, Cecília Havrilová
- **Integration of study programs Cybernetics and Artificial Intelligence**. Cultural and Education Grant Agency Project No. 034TUKE-4/2014, duration 2014 – 2016, members: Ján Vaščák (project leader), Anna Jadlovská, Mária Virčíková, Rudolf Jakša, Peter Sinčák, Marián Mach, Kristína Machová
- **CyberLabTrainSystem – demonstrational and training of informationcontrol systems – innovation**. Cultural and Education Grant Agency Project No. 001TUKE-4/2015, duration 2015 – 2017, members: Iveta Zolotová (project leader), Marek Bundzel, Peter Papcun, Ján Sarnovský, Anna Jadlovská, Ján Jadlovský, Slávka Jadlovská, Tomáš Lojka, Peter Michalik, Martin Miškuf, Jozef Mocnej, Jakub Čerkala, Michal Kopčík, Dominik Vošček, Michal Varga, Matej Oravec, Ján Štofa, Ján Čabala, Anna Novická, Michal Puheim
- **Introduction of Education in Big Data Analytics**. Cultural and Education Grant Agency Project No. 025TUKE-4/2015, duration 2015 – 2017, members: Ján Paralič (project leader), Martin Sarnovský, Peter Bednár, František Babič, Peter Butka, Kristína Machová, Marián Mach, Michal Vadovský, Miroslav Smatana, Miroslava Muchová, Martin Mikula, Zuzana Vantová
- **Digitalization, virtualization and testing of a small turbojet engine and its elements using stands for modern applied lecturing**, Cultural and Education Grant Agency Project No. 014TUKE-4/2015, duration 2015 – 2017, members: Peter Butka (previously Ladislav Madarász) - project leader, Rudolf Andoga (project vice leader), Tobiáš Lazar, Ladislav Főző, Vladimír Gašpar, Jozef Judičák, Michal Puheim, Ladislav Nyulászi, and Róbert Bréda
- **University Science Park TECHNICOM for Innovation Applications Supported by Knowledge Technology**, ITMS: 26220220182, supported by the Research & Development Operational Programme funded by the ERDF. Three pilot projects are performed at our department:
 - PP4: IT tools and services for analysis of various types of processes, Ján Paralič - pilot project leader, members: František Babič, Gabriel Tutoky, Martin Sarnovský, Peter Bednár, Peter Butka, Alexandra Lukáčová, Vladimír Gašpar, Cecília Havrilová, Michal Puheim, Miroslava Muchová, Martin Mikula
 - PP5 – Cloud and dynamic services for distributed. intelligent and mobile networks: lead by Frantisek Jakab from DCI, from DCAI have been participating: Iveta Zolotová, Peter Michalik, Tomáš Lojka, Martin Miškuf
 - PP6: Use of artificial intelligence in intelligent systems, Peter Sinčák- pilot project leader
 - PP7: Center for Nondestructive Diagnostics of Technological Processes Using Standard Software for Control and

Communication, Ján Jadlovský - pilot project leader, members: Ján Sarnovský, Anna Jadlovská, Iveta Zolotová, Slávka Jadlovská, Peter Papcun, Jakub Čerkala, Michal Kopčík, Matej Oravec, Ján Čabala

- **Transfer of the IoT open cloud platform into industry**, IBM Country Project Innovation Award. Project leader: Iveta Zolotová, members: Tomáš Lojka, Marek Bundzel, Martin Miškuf, Jozef Mocnej, Michal Puheim, students
- **Pilot laboratory projects - IoT with IBM**. IBM Country Project Innovation Award. Project leader: Iveta Zolotová, members: Peter Papcun, Tomáš Lojka, Marek Bundzel, Martin Miškuf, Jozef Mocnej, Anna Novická, Daniel Lorenčík, Michal Puheim, students
- **Microsoft Azure Research Award**: IoT Cloud Control – Smart Living and Smart Manufacturing, project leader: Jozef Mocnej
- **Robot - Human Coexistence in the Education of the Internet of Things**, Foundation of Tatra banka – Quality of Education, No. 2015vs075. Project leader: Ján Vaščák, members: Rudolf Jakša, Jakub Hvizdoš, Michal Puheim, Jakub Szász, Adam Březina.
- **CASTLE - Comfortable and Smart Living Expanded**: Tatrabanka – Foundation E-talent. Project leader: Peter Papcun, members: Iveta Zolotová, Jozef Mocnej, Martin Miškuf, Tomáš Lojka, students
- **Data collection and smart industry in the Internet of Things and cloud technology**, faculty research grant, project leader: Tomáš Lojka
- **Data mining for effective medical diagnostics**, faculty research grant, project leader: František Babič, members: Miroslava Muchová, Ladislav Nyulászi, Michal Vadovský, Vladimír Gašpar

6 CO-OPERATION

6.1 Co-operation in Slovakia

- Department of Automatic Control Systems Bratislava, Slovak University of Technology, Bratislava
- Institute of Intelligent Systems, Faculty of Informatics, Slovak University of Technology, Bratislava
- Faculty of Informatics and Information Technologies, Slovak University of Technology in Bratislava
- Institute of Computer Science, Slovak Academy of Sciences in Bratislava
- Department of Biophysics IEP Slovak Academy of Science
- Institute of Computer Science, University of P.J. Šafárik, Košice
- Institute of Experimental Physics, Slovak Academy of Sciences
- Department of applied informatics (Centre for Cognitive Science), Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava
- Department of Control and Information Systems, Faculty of Electrical Engineering, University of Zilina
- IT Valley Košice
- US Steel Košice
- Microsoft Slovakia

- IBM Slovakia
- Control Systems Slovakia
- Betamont Slovakia

6.2 International Co-operation

- Department of Software Engineering and Interactive Systems, Vienna University of Technology, Austria
- Dept. for Technical & Operational Information Systems (Data & Knowledge Engineering Group), Otto-von-Guericke-University Magdeburg, Germany
- University of Regensburg, Germany
- University of Dortmund, Germany
- Waseda University, Tokyo, Japan
- Technical University of Czestochowa
- Tokyo Institute of Technology, Japan
- Kyushu Institute of Technology, Japan
- University Pablo de Olavide of Seville, Spain
- Université Joseph Fourier Grenoble, IUT 1 (Institut Universitaire de Technologie 1), Grenoble, France
- Heudiasyc UMR CNRS 6599, UTC, Compiègne, France
- Université Henri Poincaré, Laboratoire CRAN (Centre de Recherche en Automatique de Nancy), Nancy 1, France
- Department of Informatics, Technical University Ostrava, Czech Republic
- Department of Control Systems and Instrumentation, Faculty of Mechanical Engineering Technical University Ostrava, Czech Republic
- Department of Cybernetics and Biomedical Engineering, Technical University Ostrava, Czech Republic
- Department of Cybernetics, Czech Technical University Prague, Czech Republic
- Department of Control Engineering, Czech Technical University, Prague, Czech Republic
- Institute of Information Theory and Automation, Academy of Sciences of Czech Republic, Prague, Czech Republic
- Department of Information Engineering, Faculty of Economics and Management, Czech University of Agriculture, Prague, Czech Republic
- University of Hradec Králové, Czech Republic
- Dept. of Computer Science and Engineering, Faculty of Applied Sciences, University of West Bohemia, Plzeň
- Faculty of Mechanical Engineering, Department of Automation, Institute of Information, University of Miskolc, Hungary
- Óbuda University, Budapest, Hungary
- Budapest University of Technology and Economics, Hungary
- Hungarian Academy of Sciences, Computer and Automation Research Institute, Hungary
- Regional Association of the Hungarian Academy of Sciences, Miskolc, Hungary

6.3 Membership in International Organizations and Societies

- Jakša, R.: IEEE, Computational Intelligence Society
- Krokavec, D.: Member of the International Federation of Automatic Control IFAC Technical Committee TC 1.4 Stochastic Systems

- IEEE Student Branch – Lojka, Miškuf, Hvizdoš, Mocnej, Ferenčík, Kajáti
- Ocelíková, E.; Sinčák, P.; Zolotová, I.: CPRS Czech Pattern Recognition Society
- Ocelíková, E.: CSSS Czech and Slovak Society for Simulation
- Machová, K.: ACM – Association of Computer Machinery
- Paralič, J.: ACM – Association for Computing Machinery, IEEE
- Sabol, T.: Information Society Technologies Program Committee (IST PC), 5th Framework Program, Brussels
- Sarnovský, J.: IEEE
- Sarnovský, J.: INES International Network of Engineers and Scientists for Global Responsibility
- Sarnovský, J.: Principia Cybernetica Web PRNCYB-L
- Sarnovský, J.: SWIIS Supplementary Ways for Improving International Stability
- Sinčák P.: European Society of Neural Networks
- Sinčák P.: IEEE, Computational Intelligence Society
- Vaščák, J.: IEEE, Computational Intelligence Society
- Zolotová, I.: IEEE, IEEE Communication Society, IEEE Computer Society
- Zolotová, I.: EAAEIE – European Association for Education in Electrical and Information Engineering

6.4 Membership in Slovak Organizations and Societies

- The whole Department of Cybernetics and Artificial Intelligence is a team member of:
 - Slovak Society for Cybernetics and Informatics
 - Slovak AI Society
- Filasová, A.: Slovak Society for Cybernetics and Informatics
- Krokavec, D.: Slovak Electrical Engineering Society
- Jadlovská, A; Ocelíková, E.; Sarnovský, J.: Slovak Society for Cybernetics and Informatics
- Paralič, J.: Slovak Society for Computer Science
- Sabol, T.: Board of the Open Society Fund, Bratislava

6.5 International Networks and Exchange Programs

- SALEIE, Strategic Alignment of Electrical and Information Engineering in European Higher Education Institutions, Reference number: 527877-LLP-1-2012-1-UK-ERASMUS-ENW. Contact person: Iveta Zolotová
- OI-Net, European Academic Network for Open Innovation, Reference number: 542203-LLP-1-2013-1-FI-ERASMUS-ENW- Iveta Zolotová
- Erasmus+ programme Inter-institutional agreement 2014-2021 between TU of Košice and TECHNOLOGIKO EKPAIDEFTIKO IDRYMA-PIREA, T.E.I. Pirea, Greece, contact person: Iveta Zolotová
- Erasmus+ programme agreement between TU of Košice and University of Wellington New Zealand, contact person: Iveta Zolotová
- Socrates Erasmus agreement between TU of Košice and Czech University of Life Sciences, Prague, Czech Republic. Contact person: Eva Ocelíková
- Socrates Erasmus agreement between TU of Košice and Université Henri Poincaré, Nancy 1, France, Contact person: Ján Sarnovský
- Socrates Erasmus agreement between TU of Košice and University Pablo de Olavide, Sevilla, Spain. Contact person: Ján Vaščák

- Socrates Erasmus agreement between TU of Košice and University Hradec Kralove, Czech Republic. Contact person: Ján Vaščák

6.6 Visitors to the Department

- Kaori Yoshida, Kyushu Institute of Technology, Japan
- Filippo Cavallo, Scuola Superiore Sant Anna, Italy
- Ruzena Bajcsy, UC Berkeley, USA
- P. Šaloun, VŠB - Technical University of Ostrava, Czech Republic
- A. Víteček, VŠB - Technical University of Ostrava, Czech Republic

6.7 Visits of Staff Members to Foreign Institutions

- J. Jadlovský, Switzerland, 11.-17.01.2016
- M. Varga, M. Vošček, Switzerland, 11.01.-01.02.2016
- M. Virčíková, Spain, 27.-31.1.2016
- P. Bednár, Netherlands, 24.-27.02.2016
- P. Butka, France, 22.-24.02.2016
- D. Krokavec, A. Filasová, Malta, 05.-09.04.2016
- K. Machová, M. Szaboová, Hungary, 02.05.2016
- J. Jadlovský, M. Oravec, Switzerland, 30.05-07.06.2016
- T. Cádrik, Czech Republic, 07.-10.06.2016
- E. Ocelíková, Czech Republic, 01.-30.06.2016
- P. Sinčák, Hungary, 17.-18.06.2016
- M. Kopčík, M. Varga, Switzerland, 14.06-04.07.2016
- P. Butka, Germany, 23.06-08.07.2016
- T. Lojka, Austria, 03.07-31.08.2016
- D. Krokavec, Spain, 03.-09.07.2016
- M. Čertický, Austria, 17.-20.07.2016
- M. Sarnovský, M. Smatana, M. Vadovský, Spain, 17.-23.07.2016
- P. Sinčák, Czech Republic, 04.-05.08.2016
- J. Mocnej, Germany, 16.-22.08.2016
- M. Miškuf, China, 11.-28.08.2016
- P. Papcun, Mallorca, 17.-25.08.2016
- P. Sinčák, Japan, 18.08-03.09.2016
- P. Takáč, Japan, 24.08-04.09.2016
- P. Sabol, Japan, 23.08-04.09.2016
- M. Miškuf, Brasil, 01.-12.09.2016
- P. Sinčák, J. Jadlovský, A. Jadlovská, S. Jadlovská, J. Sarnovský, I. Zolotová, P. Papcun, M. Sarnovský, V. Gašpar, J. Vaščák, Czech Republic, 04.-09.09.2016
- J. Mocnej, M. Mikula, New Zealand, 05.09.2016-28.07.2017
- D. Krokavec, A. Filasová, Spain, 06.-10.09.2016
- P. Butka, Romania, 07-09.09.2016
- J. Vaščák, Czech Republic, 08.-09.09.2016
- F. Babič, Gdansk, Poland, 11.-14.09.2016
- P. Bednár, M. Smatana, Czech Republic, 12.-16.09.2016
- P. Butka, F. Babič, Wroclaw, Poland, 14.-16.09.2016
- G. Magyar, Italy, 16.09-19.12.2016
- P. Butka, M. Sarnovský, F. Babič, Karpacz, Poland, 18.-20.09.2016
- P. Papcun, S. Jadlovská, D. Vošček, Czech Republic, 04.-07.10.2016

- P. Sinčák, M. Puheim, P. Takáč, P. Sabol, P. Takáč, P. Sabol, Budapest, Hungary, 09.-12.10.2016
- P. Bednár, Spain, 12.-15.10.2016
- D. Krokavec, France, 16.-19.11.2016
- F. Babič, Belgium, 24.-26.10.2016
- P. Sinčák, R. Andoga, L. Fozo, V. Gašpar, Hungary, 17.-18.11.2016
- J. Vaščák, I. Zolotová, Czech Republic, 08.-10.12.2016
- J. Jadlovský, Switzerland, 08.-09.12.2016

7 THESES

Thesis type	Bachelor	Master	Doctoral
Number	70	91	6

8 OTHER ACTIVITIES

- SAMI 2016 (IEEE 14th International Symposium on Applied Machine Intelligence and Informatics) was held on January 21-23, 2016 in Herľany, Slovakia: <http://conf.uni-obuda.hu/sami2016/>

9 PUBLICATIONS

9.1. Books

- [1] GAŠPAR, Vladimír - OCELÍKOVÁ, Eva - NYULÁSZI, Ladislav - PUHEIM, Michal - ANDOGA, Rudolf: Rozhodovanie a zložitost'. 1st edition, Košice, Univerzitná knižnica TU, 2016, 215 p., ISBN 978-80-553-2523-1.
- [2] MACH, Marián: Reprezentácia znalostí a riešenie úloh logické prístupy. 1st edition, Košice, Technická univerzita, 2016, 96 p., ISBN 978-80-553-2632-0.
- [3] MACHOVÁ, Kristína: Nové trendy v strojovom učení štatistický prístup. 1st edition, Košice, TU, 2016, 96 p., ISBN 978-80-553-2602-3.

9.1 Journals

- [1] BABIČ, František LUKÁČOVÁ, Alexandra PARALIČ, Ján: Descriptive and predictive analyses of data representing aviation accidents. In: Advances in Intelligent Systems and Computing. Vol. 314 (2015), p. 181-190. ISSN 2194-5357
- [2] ABELEV, B. - ADAM, J. - ADAMOVA, D. - AGGARWAL, M.M. - AGNELLO, M. - ČERKALA, Jakub - JADLOVSKÁ, Slávka - KOPČÍK, Michal - PAPCUN, Peter - VALA, Martin: Forward-central two-particle correlations in p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. In: Physics Letters B. Vol. 753 (2016), p. 126-139. - ISSN 0370-2693.
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9.2 Other publications

Publication Type	Confereces		Other
	Foreign	Home	
Number	14	54	25