

Curriculum Vitae

Personal information

Surname/First name **JADLOVSKÁ Slávka, Ing.**
Address Komenského 58, 040 01 Košice, Slovak Republic
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E-mail slavka.jadlovska@tuke.sk, sjadlovska@gmail.com
Nationality Slovak
Date of birth June 25th, 1988
Gender Female

Desired employment / Occupational field

PhD Student – Cybernetics, Automation and Control Systems

modeling of mechatronic systems, optimal control of nonlinear dynamic systems, hybrid methods of control, practical application of the *MATLAB/Simulink* programming environment and selected toolboxes, programming and algorithm design (C, C++, C#, Java), mathematical modeling of economic processes

Education and training

Dates September 2011 – August 2014 (expected completion date)
Title of qualification awarded Philosophiae Doctor – PhD. (study program: *Cybernetics and information-control systems*)
Principal subjects / occupational skills covered
Dissertation thesis topic:
Hybrid Methods of Control of Dynamic Systems
Specialized courses:
theoretical basics of cybernetics, information-control systems
Research activities:
Research team member for project ***Dynamic Hybrid Architectures in Multi-Agent Network Control Systems*** – VEGA 1/0286/11 (2011-2013)
Research team member for project ***Development of Modern University Textbooks for the Core Elements of the Newly-Transformed Study Program, "Cybernetics and Information-Control Systems" in the Second Degree of Study*** – KEGA 034TUKE - 4/2011 (2011-2013)
Research team member for project ***CyberLabTrainSystem - Demonstrator and Trainer of Information-Control System*** – KEGA 021TUKE - 4/2012 (2012-2014)
Pedagogical activities:
Teaching bachelor-degree courses (***Computers and Algorithms, Simulation Systems, Single-Chip Microcontrollers***)
Name and type of organization providing education and training Technical University of Košice
Faculty of Electrical Engineering and Informatics
Department of Cybernetics and Artificial Intelligence
Letná 9, 042 00 Košice
Level in national or international classification ISCED 6 – 3rd degree (will be attained after a successful defense of dissertation thesis)
Dates September 2009 – May 2011
Title of qualification awarded engineer's degree – Ing., obtained with honors (study program: *Cybernetics and information-control systems*)
Principal subjects / occupational skills covered mathematics, optimal, adaptive and robust control of dynamic systems, control and diagnostics of discrete stochastic systems, control of large scale systems, principles of artificial intelligence in control (neural networks, evolutionary algorithms), multiple-criteria decision-making and situational

control, five-level model of distributed control systems, computer vision fundamentals, knowledge management, philosophy and philosophical aspects of cybernetics / artificial intelligence

Diploma (Master) thesis title:

Modeling and Optimal Control of Inverted Pendula Systems

Name and type of organization providing education and training

Technical University of Košice
Faculty of Electrical Engineering and Informatics
Department of Cybernetics and Artificial Intelligence
Letná 9, 042 00 Košice

Level in national or international classification

ISCED 5A – 2nd degree

Dates

September 2006 – June 2009

Title of qualification awarded

bachelor's degree – Bc., obtained with honors (study program: *Cybernetics*)

Principal subjects / occupational skills covered

mathematics, electrical engineering, physics, algorithmization, automatic control theory (linear and nonlinear dynamic systems, modeling and identification), practical applications of control (single-chip microcontrollers, PLC, visualization), introduction to cybernetics and artificial intelligence, programming (procedural, object-oriented, applied), computer networks, professional English

Bachelor thesis title:

Inverted Pendula Modeling and Control

Name and type of organization providing education and training

Technical University of Košice
Faculty of Electrical Engineering and Informatics
Department of Cybernetics and Artificial Intelligence
Letná 9, 042 00 Košice

Level in national or international classification

ISCED 5A – 1st degree

Personal skills and competences

Mother tongue

Slovak

Other languages

Self-assessment

European level ()*

English

French

Italian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B2	Independent user	C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
B1	Independent user	B1	Independent user	A2	Basic user	A2	Basic user	A2	Basic user

(*) *Common European Framework (CEF) of Reference for Languages*

Social skills and competences

versatility of interests, ability to learn quickly and independently, high professional commitment, responsibility, flexibility, excellent communication skills and teamwork
membership in the *Center of Modern Control Techniques and Industrial Informatics* at DCAI FEEI of TU (<http://kyb.fei.tuke.sk/laben/>)

Organizational skills and competences

consultations of final (bachelor) theses for students of *Cybernetics* and *Business Informatics* study programs
membership in the organizing committee of the *12th Scientific Conference of Young Researchers – SCYR 2012*

Technical skills and competences

excellent working knowledge of computer technology
fundamentals of single-chip microcontrollers (18051, 180552)
theoretical and practical knowledge of computer networking in line with the complete **Cisco Certified Network Associate (CCNA 1-4)** curriculum
experience in control of laboratory educational models using software by *Humusoft* (Real Time Toolbox) and *Rex Controls* (REX)

Computer skills and competences	<p>comprehensive user experience with Microsoft Windows operating systems and the Microsoft Office suite (Word, Excel, PowerPoint, Access)</p> <p>advanced command of the C programming language (acquired through control application design) as well as object-oriented languages (C++, C#, Java – experience in information system development)</p> <p>excellent insight into the MATLAB/Simulink simulation language/programming environment and toolboxes suitable for modeling and control of dynamic systems</p> <p>good knowledge of programming packages for technological process control using programmable logic controllers (Rockwell Automation - RSLogix)</p> <p>good knowledge of process visualization tools (Wonderware InTouch)</p> <p>user experience with UNIX & Linux-based operating systems</p> <p>database fundamentals – SQL & PL/SQL language, multidimensional database configuration (OLAP) using software products by Oracle</p> <p>fundamentals of assembler-level programming for 18080 and 18051/180552 microcontrollers</p> <p>fundamentals of webdesign (HTML, CSS, PHP, JavaScript)</p>
Artistic skills and competences	playing the violin, choir singing, ballroom dancing
Other skills and competences	active interest in history, literature and classical music athletics (long-distance running)
Driving license	category B

Additional information

Awards	Košice IT Valley Award 2011 for the best diploma thesis in the field of IT
List of foreign language certificates	Certificate in Advanced English (CAE) – December 2008, grade A Diplôme d'études en langue française (DEL F B1) – June 2006, grade 91/100
List of published scientific and professional works	<p>AED – Original scientific works published in national reviewed scientific proceedings or monographs</p> <p>JADLOVSKÁ, S. – SARNOVSKÝ, J.: <i>Matlab-Based Tools for Analysis and Control of Inverted Pendula Systems</i>. Electrical Engineering and Informatics 2: Proceeding of the Faculty of Electrical Engineering and Informatics of the Technical University of Košice. Košice, FEEI TU, 2011. pp. 403-408, ISBN 978-80-553-0611-7.</p> <p>AFC – Papers published in proceedings of foreign scientific conferences</p> <p>JADLOVSKÁ, S. – JADLOVSKÁ, A.: <i>A Simulink Library for Inverted Pendula Modeling and Simulation</i>. 17th Annual Conference Proceedings of the International Scientific Conference - Technical Computing Prague 2009, November 19, 2009, Congress Center - CTU Prague, Czech Republic, pp. 45, ISBN 978-80-7080-733-0.</p> <p>JADLOVSKÁ, S. – JADLOVSKÁ, A.: <i>Inverted Pendula Simulation and Modeling – a Generalized Approach</i>. Proceedings of the 9th International Scientific–Technical Conference on Process Control – ŘÍP 2010, June 7-10 2010, Pardubice University, Czech Republic, ISBN 978-80-7399-951-3.</p> <p>JADLOVSKÁ, S. – SARNOVSKÝ, J.: <i>An Extended Simulink Library for Inverted Pendula Modeling and Simulation</i>. 19th Annual Conference Proceedings of the International Scientific Conference - Technical Computing Prague 2011, November 8, 2011, Congress Center - CTU Prague, Czech Republic, ISBN 978-80-7080-794-1.</p> <p>JADLOVSKÁ, S. – SARNOVSKÝ, J.: <i>Nonlinear Control Design for Inverted Pendulum Systems Based on State-Dependent Riccati Equation Approach</i>. Proceedings of the 5th International Conference on Applied Electrical Engineering and Informatics – AEI 2012, August 26 – September 2, 2012, Kiel, Germany, ISBN 978-80-553-1030-5.</p> <p>AFD – Papers published in proceedings of national scientific conferences</p> <p>BABIČ, F. – WAGNER, J. – JADLOVSKÁ, S. – LEŠKO, P.: <i>A Logging Mechanism for Acquisition of Real Data from Different Collaborative Systems for Analytical Purposes</i>. Proceedings of the 8th International Symposium on Applied Machine Intelligence and Informatics – SAMI 2010, January 28 - 30, 2010, Herľany, Slovak Republic, pp. 109-112, ISBN 978-1-4244-6423-4.</p> <p>- referenced in:</p>

STRIGŪNAITĒ, S. – KRIKŠČINIENĒ, D.: *Fuzzy Expert System for Virtual Team Collaboration and Work Evaluation*. Business Information Systems Workshops: Lecture Notes in Business Information Processing, 2012, Part 1, pp. 37-43, ISBN 978-3-642-34228-8_4.

STRIGŪNAITĒ, S. – KRIKŠČINIENĒ, D.: *Intelektualus Duomenų Analizės Metodus Virtualaus Komandinio Darbo Vertinimui*. Socialinės technologijos (Social Technologies) 2012, Volume 2(1), pp. 7–23, ISSN 2029-7564 (online).

JADLOVSKÁ, S. – SARNOVSKÝ, J.: *Classical Double Inverted Pendulum - a Complex Overview of a System*. Proceedings of the IEEE 10th Jubilee International Symposium on Applied Machine Intelligence and Informatics – SAMI 2012, January 26-28, 2012, Herľany, Slovak Republic, pp. 103-108, ISBN: 978-1-4577-0195-5.

JADLOVSKÁ, S.: *Swing-up and Stabilizing Control of Classical and Rotary Inverted Pendulum Systems*. Proceedings of the 12th Scientific Conference of Young Researchers – SCYR 2012, May 15, 2012, Herľany, Slovak Republic, pp. 38-41, ISBN: 978-80-553-0943-9.

JADLOVSKÁ, S. – SARNOVSKÝ, J.: *A Complex Overview of the Rotary Single Inverted Pendulum System*. Proceedings of the 9th International Conference - ELEKTRO 2012, May 21-22, 2012, Žilina - Ražecské Teplice, Slovak Republic, pp. 305-310, ISBN: 978-1-4673-1178-6.