

SAMI 2014 Final Program

updated on January 14, 2013

January 23, Thursday

11:00 – 11:10 Opening Ceremony

11:10 – 11:50 Plenary Session I

Session Chair: Imre J. Rudas

91	Zoltán Vámosy and Tamás Haidegger	The Rise of Service Robotics: Navigation in Medical and Mobile Applications
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11:50 – 12:30 Plenary Session II

Session Chair: János Fodor

Hudák, R., Živčák, J., Lisý, M., Bujňák, J.: Additive Manufacturing in Implantology

12:30 – 14:00 Lunch

14:00 – 15:40 Session [T1]

Session Chair: Ladislav Főző

9	Liberios Vokorokos, Ján Hurtuk and Miroslav Hartinger	Customer Relationship Management System proposal with emphasis on simplicity and security using distributed system architecture
33	Ondrej Biroš, Ján Karchňák, Dušan Šimšík and Alexander Hošovský	Implementation of wearable sensors into smart household
40	Lavinia Ferariu and Agrigoroaie Corina	Multiobjective Hybrid Evolutionary Path Planning with Adaptive Pareto Ranking of Variable-Length Chromosomes
17	Tibor István Nagy and József Tick	Self-Organization Issues of Wireless Sensor Networks
69	Michal Puheim and Ladislav Madarász	Normalization of Inputs and Outputs of Neural Network Based Robotic Arm Controller in Role of Inverse Kinematic Model

14:00 – 15:40 Poster Session [TP1]

65	Marián Hruboš and Aleš Janota	3D surface modeling based on data from the mobile measurement platform
89	Michal Gala, Ivana Vajdikova, Branko Babusiak, Marek Penhaker, Martin Cerny and Martin	Battery Check Test on Pacemaker by Advanced Technique

Augustynek19 **Peter Michal, Alena Vagaská, Miroslav Gombár, Alexander Hošovský and Ján Kmec**

Monitoring of influence of significant parameters during anodizing of aluminium

56 **Jozsef Lakner, Gabor Lakner and Zoltan Oláh**

Self-Annealing at Hot Rolling

52 **Csaba Szabó, Maroš Kotuľa and Richard Petruš**

The First Proposal on Objects and Morphisms of the Software Evolution Category

15:40 – 16:00 Coffee break

16:00 – 17:40 Session [T2]

Session Chair: Rudolf Andoga

48 **László Kundra and Péter Ekler**

Non-Deceiving Features in Fused Optical Flow Gyroscopes

18 **Francisco Siles-Canales**

Shot Classification for Association Football from TV Broadcasting

37 **Michal Gregor and Juraj Spalek**

Novelty Detector for Reinforcement Learning Based on Forecasting

58 **Stefano-Niko Orzen**

Domain Relations in Trees Arborescence for Interaction Search on Persistent Routing Availability

73 **Lucia Fedorová, Viktória Rajt'úková, Teodor Tóth and Jozef Živčák**

EMG system application in muscle parametrization of the upper extremities

16:00 – 17:40 Poster Session [TP2]

11 **Jozsef Katona, Imre Farkas, Tibor Ujbanyi, Peter Dukan and Attila Kovari**

Evaluation Of The Neurosky MindFlex EEG Headset Brain Waves Data

51 **Imre Farkas, Peter Dukan, Jozsef Katona and Attila Kovari**

Protocol applied to LabVIEW for Wireless Sensor Networks

35 **Juraj Vízi, Zdeněk Havlice and Veronika Szabóová**

Testing medical embedded software

8 **Peter Butka, Jana Pocsova and Jozef Pocs**

Bisection-based Merging Algorithm for Creation of One-Sided Concept Lattices

75 **František Adamčík, Róbert Bréda, Tobiáš Lazar and Michal Puheim**

Diagnostics of complex systems using thermography

18:00 Banquet

January 24, Friday

9:00 – 9:40 Plenary Session III

Session Chair: Peter Sincák

87 Szilveszter Kovács

Fuzzy Rule Interpolation-based Behavior Modeling for Human-Robot Interaction

9:40 – 10:00 Coffee break

10:00 – 12:00 Session [F1]

Session Chair: György Györök

44	Jolana Sebestyénová and Peter Kurdel	Workflow for a Multi-agent System with Voice User Interfaces in a Changing Environment
23	Iulia Maria Haragos, Stefan Holban and Cosmin Cernazanu-Glavan	Determination of quality factor used in road traffic. An experimental study.
15	Admir Mujkić, Ivan Boban, Ivan Dugandzic and Nina Bijedic	Analysis of social networks
16	Admir Mujkić, Ivan Boban, Ivan Dugandzic and Nina Bijedic	Decision tree
42	Milos Los and Iveta Zolotova	Modelling of an organization as a complex system
64	Gábor Kertész and Éva Hajnal	Special Issues in the Development of a Large User Based Web Application

10:00 – 12:00 Poster Session [FP1]

70	Marcel More and Ondrej Líška	Control of servo system driven by pneumatic artificial muscle
47	František Menda, Patrik Šarga, Erik Prada and František Trebuňa	Solidworks API for Ring-Core simulations
92	József Gáti, Franciska Hegyesi and Gyula Kártyás	Courses for Engineers Considering the Age of Virtual Engineering
54	Tomáš Cádrik and Marian Mach	Control of Agents in a Multi-agent System using ZCS Evolutionary Classifier Systems
13	Tomáš Kot, Ján Babjak, Václav Kryš and Petr Novák	System for Automatic Collisions Prevention for a Manipulator Arm of a Mobile Robot

12:00 – 13:30 Lunch

13:30 – 14:50 PhD Special Session [F2]

Session Chair: Levente Kovács

72	Adrienn Dineva , Annamária R. Várkonyi-Kóczy and József K. Tar	Combination of RFPT-based Adaptive Control and Classical Model Identification
82	György Csaba and Zoltán Vámosy	Kalman filter based position estimation using "Optical Mouse Movement Sensor" and Differential Drive robot model
59	István Orosz, Tamás Orosz and Attila Selmeçi	Business Process Management Curriculum Development by means of ERP Suite applications
93	József Klespitz and Levente Kovács	Peristaltic pumps – a review on working and control possibilities

13:30 – 14:50 Poster Session [FP2]

77	Rudolf Andoga , Maroš Komjáty, Ladislav Főző and Ladislav Madarasz	Design of the variable exhaust nozzle control system for a small turbojet engine MPM-20
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36	Jan Lipina, Jiří Marek and Václav Kryš	SCREW CONNECTION AND ITS LOAD CAPACITY IN COMPONENTS MADE BY RAPID PROTOTYPING TECHNOLOGY
7	Alexander Hošovský, Peter Michal, Mária Tóthová and Ondrej Biroš	Fuzzy Adaptive Control for Pneumatic Muscle Actuator with Simulated Annealing Tuning
14	Panagiotis Kalagiakos and Gábor Kiss	Dependence Pedagogy in a Multicultural School
30	Martin Sarnovsky and Michal Vronc	Distributed boosting algorithm for classification of text documents

14:50 – 15:10 Coffee break

15:10 – 17:10 Session [F3]

Session Chair: Vladimír Gaspar

38	Michal Varga and Miroslav Mintál	Microscopic pedestrian movement model utilizing parallel computations
43	Mihai Pomarlan	Mapping Kinematic Interactions Between Objects for Robot Motion Planning
68	Dan Mihai Mihailescu, Vasile Gui, Corneliu Ioan Toma, Alina Popescu and Ioan Sporea	Simultaneous Filtering and Tracking of Focal Liver Lesion for Time Intensity Curve Analysis in Contrast Enhanced Ultrasound Imagery
84	János Abonyi, Barbara Farsang and Tibor Kulcsár	Data-driven Development and Maintenance of Soft-Sensors
60	Marek Skokan, Marian Mach, Tomas Sabol and Peter Kostelnik	Demo Application Supporting Smart Grid Control
45	Michal Kocifaj and Norbert Adamko	Modelling of Container Terminals using Two-Layer Agent Architecture

15:10 – 17:10 Poster Session [FP3]

90	Peter Poór	Strengthening of Boundary Processes in a Company Using Specific Computer-aided Facility Management Software
55	György Györök	Crossbar Network for Automatic Analog Circuit Synthesis
53	Zoltán A. Godó, Marcell Loós and Kocsis Dénes	Multiprocessors parallel computer for the signal processing of living nervous system
22	Zdenko Bobovský, Petr Novák, Václav Kryš and Tomáš Kot	The Module for a Self-Reconfigurable Robotic System
29	Liberios Vokorokos, Miroslav Hartinger, Michal Ennert and Norbert Ádám	Increasing Efficiency of the Sequential Algorithms Programs Execution Using CUDA 5.0

17:30 Dinner

January 25, Saturday

9:00 – 11:00 Session [S1]

Session Chair: Michal Puheim

Mária Virčíková, Ján Gamec: Towards the revolution of social robots: from laboratories to the human world

86	Gergely Magyar and Tomáš Cádrik	Towards Adaptive Cloud-based Platform for Robotic Assistants in Education
49	Stanislav Dvorščák and Kristína Machová	Intelligent Searching Using Delay Semantic Network
57	Renat Vishnyakov and Yury Vishnyakov	Representation of Semantically Cohesive Sentence Fragments in Scientific and Technical Texts
62	Štefan Korečko, Tomáš Herich and Branislav Sobota	JBdiEmo – OCC Model Based Emotional Engine for Jadex BDI Agent System
63	József Lakner, Éva Hajnal, Gábor Lakner and Judit Padisák	Multitude Number Estimation Based on Species Frequency

9:00 – 11:00 Poster Session [SP1]

74	Iveta Glodová and Jozef Bocko	Evaluating the precision of contactless measurement using computer tomography
41	Jan Lang and Zdenko Capík	Prediction based on hybrid method in complex event processing
34	Peter Butka, Jana Pocsova and Jozef Pocs	GOSCL as Facet-like Structures
26	Tomáš Lojka, Martin Miškuf and Iveta Zolotova	Service oriented architecture for remote machine control in ICS
25	Peter Michalik, Ján Štofa and Iveta Zolotová	Concept Definition for Big Data Architecture in the Education System

11:00 – 11:20 Coffee break

11:20 – 13:00 Session [S2]

Session Chair: Tamás Haidegger

78	Jozef Kováč, Peter Malega and Monika Čupová	Pilot project of method quick changeover implementation in NC machining of car's clutch housing
85	Árpád Takács, Sándor Jordán, Radu-Emil Precup, Levente Kovács, József K. Tar, Imre J. Rudas and Tamás Haidegger	Review of Tool–Tissue Interaction Models for Robotic Surgery Applications
66	Ján Ďurech and Mária Franeková	Security attacks to ZigBee technology and their practical realization
67	Tomáš Mravec and Peter Vestenický	Localization of Objects Based on Inertial Sensor Data
88	Branko Babusiak, Michal Gala, Marek Penhaker, Martin Cerny and Jan Kraus	Dry Contact Less Surface Electrodes for Bioelectrical Measurements

11:20 – 13:00 Poster Session [SP2]

31	Peter Bednar, Martin Sarnovsky and Viktor Demko	RDF vs. NoSQL databases for the Semantic Web applications
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28	Alexandra Lukáčová, František Babič and Ján Paralič	Building the Prediction Model from the Aviation Incident Data
32	Roman Mihaľ and Iveta Zolotová	Incidents, Alarms and Events in Information and Control Systems
76	Pavol Kurdel, Tobiáš Lazar and Ján Labun	Computing Skills in Aviation Ergatic Systems
81	Peter Trebuňa, Jana Halčinová, Milan Fiľo and Jaromír Markovič	The need of normalization and standardization in the process of clustering

13:00 Lunch, Closing and Invitation to SAMI 2015