

# EEICT 2012

## Obsah

## Předmluva

## Magisterské projekty

### Elektronika a komunikace

#### Barcík, P.

The Distribution of Relative Variance of Optical Intensity in Laser Beam Profile . . .

#### Faltičko, M.

Professional RC Transmitter . . . . .

#### Filip, T.

Design of High-Speed Optical Networks . . . . .

#### Kufa, M.

Planar Fractal Filter on Defected Ground Substrate . . . . .

#### Mego, R.

RFID Access Terminal . . . . .

#### Možný, K.

Digital Audio Board . . . . .

#### Rumíšek, T.

Light System Control via Powerline Communications . . . . .

#### Satora, O.

LED Light System with Adjustable Spectral Radiation . . . . .

#### Sedláček, P.

Substrate Integrated Waveguide Slot Antenna Array . . . . .

#### Svadbík, P.

Digital Audio Amplifier with Universal Inputs . . . . .

#### Šindler, P.

Retrodirective Antenna Array . . . . .

#### Šrajbr, M.

Dual-Band Helix Antenna for WiFi Band . . . . .

### Zpracování signálů, obrazu a dat

#### Kabrda, M.

Orthopantomogram Processing in Studying Cystic Disorders . . . . .

#### Kaňka, J.

Controlling and Evaluation of Laser Micromanipulation Experiments . . . . .

#### Klicnar, L.

Robust Detection of Moving Objects in Video . . . . .

#### Kovačev, R.

Phase Vocoder . . . . .

<b>Krmela, T.</b>	Subjective Quality Assessment of Video Sequences with Different Methods .....
<b>Labounek, R.</b>	Analysis of Simultaneous EEG and fMRI Data .....
<b>Mašek, J</b>	Image Object Detection Using Haar-like Features .....
<b>Mikeš, P.</b>	Measurement of Diffusion Coefficient .....
<b>Musil, M., Musil, P.</b>	Hardware Detection of Scalable Objects Based on AdaBoost Classifier .....
<b>Němec, J.</b>	Lossless Video Compression .....
<b>Němec, Z.</b>	Deriche Edge Detector .....
<b>Prymus, J.</b>	Image Processing Library Wrapper for Lua .....
<b>Slaviček, T.</b>	Software for Patients and Brain Regions Selection Suitable for Analysis of Connectivity in fMRI .....

## **Kybernetika a automatizace**

<b>Buchta, L.</b>	Performance, Robustness and Implementation of Controllers .....
<b>Černín, J.</b>	Human Detection in Commercial Applications .....
<b>Franek, L.</b>	Data Concentrator for Smart Grids .....
<b>Herman, I.</b>	State Estimation and Observability Analysis of AC Drives .....
<b>Chlad, P.</b>	Control System for Laboratory Distillation Column Model .....
<b>Opravil, J.</b>	Hybrid Hausdorff Distance in Practical Application .....
<b>Rajnošek, M.</b>	Design of Robust Current Controllers for PM Synchronous Motor .....
<b>Slováček, A.</b>	New Laboratory Workplace for Airflow Measurement .....
<b>Španihel, P.</b>	Security Module for Advertising Robot FEKT VUT Brno .....
<b>Šťastný, L.</b>	Ethernet Control System .....
<b>Uhlíř, V.</b>	Basic Quadrotor Concept .....

<b>Vožda, O.</b>	Control of a Wheelchair .....
<b>Žáček, V.</b>	Landmark Extraction Using Self-Organizing Map .....

## **Silnoproudá elektrotechnika a elektroenergetika**

<b>Cerman, M.</b>	Economic Aspects of Use of Photovoltaic Energy .....
<b>Vašíček, A.</b>	Pure Resonant Mode Power Supply .....

## **Mikroelektronika a technologie**

<b>Chvíla, L.</b>	Simulations of Fractal Capacitors .....
<b>Ovsík, J.</b>	Study of Electric Properties of Nanocomposites .....
<b>Štekovič, M.</b>	The Increase of Electrode Surface Electro-chemical Sensor by Wire Bonding Technology .....
<b>Teska, T.</b>	Transimpedance Operational Amplifier for Memristive Systems .....
<b>Vaculík, S.</b>	Electrochemical Impedance Spectroscopy on Lead-Acid Accumulators .....

## **Biomedicínské inženýrství a bioinformatika**

<b>Gajdoš, M.</b>	Tool for Simulation of Connectivity in fMRI Data .....
<b>Sedlář, K.</b>	Protein Secondary Structure Prediction Based on Neural Network .....
<b>Vítová, H.</b>	Non-Invasive Blood Glucose Measuring .....

## **Informační systémy**

<b>David, L.</b>	Datamining in MS SQL Using Incremental Algorithms .....
<b>Hanák, F.</b>	Code Generation Using Design Patterns .....
<b>Hozza, T.</b>	Static Analysis of Access Control Lists .....
<b>Hřib, D.</b>	Project Management Risks Visualization .....

<b>Kliment, R.</b>	Automatic Navigation on Private Websites .....
<b>Korec, T.</b>	Instruction and Cycle Accurate Debugger .....
<b>Lang, J.</b>	Multimedia Document Type Diff .....
<b>Pohlídal, A.</b>	Intelligent Mailbox .....
<b>Polách, O.</b>	Object Database Spatial Extension .....
<b>Rybová, V.</b>	Multicast Routing Modelling in OMNeT++ .....
<b>Stríž, R.</b>	Mining of Periodic Patterns .....
<b>Tisoň, Z.</b>	Sequential Pattern Mining .....
<b>Tomaga, J.</b>	Censorship in the Internet .....
<b>Utěkal, J.</b>	Multiuser Mapping Application for Mobile Device .....
<b>Zajíc, J.</b>	Compiler from C# Language to NVidia Language .....
<b>Žouželka, M.</b>	Fault Injection for Web Services .....

## **Grafika a multimédia**

<b>Appl, M.</b>	Intuitive Drawing on the Android Platform .....
<b>Drastil, P.</b>	Simulation and Visualization of a Water Flow .....
<b>Floryán, K.</b>	Tool for Fireworks Design and Simulation .....
<b>Hejl, Z.</b>	3D Scene Reconstruction from Images .....
<b>Horváth, Z.</b>	Real-time Particle Simulation of Fluids .....
<b>Kubík, T.</b>	Distributed System for Usability Testing .....
<b>Kučiš, M.</b>	Simulation of Camera Features .....
<b>Ligmajer, J.</b>	Hierarchical Techniques in Lighting Computation .....
<b>Mynář, P.</b>	Webcam as a Pointing Device .....

<b>Tomek, P.</b>	Approximation of Terrain Data Utilizing Multivariate Splines .....
<b>Vagner, O.</b>	Removing of Unwanted Objects in the Videosequences .....

## Počítačové systémy

<b>Dvořák, M.</b>	Reliability Measurement of the Pattern Matching .....
<b>Jirásek, J.</b>	Computer Identification Using Time Information .....
<b>Musil, M., Musil, P.</b>	PCI Express Interface for Signal and Video Processing .....
<b>Smejkal, J.</b>	Dynamic State of OMNeT++ Model via SNMP .....
<b>Šebeň, P.</b>	Identifying Skype Traffic Using NetFlow Data .....
<b>Šimon, P.</b>	Hardware Emulator of Small Home Computer ZX Spectrum .....
<b>Votava, M.</b>	Development of Platform for Three-Rotor Helicopter .....

## Intelligentní systémy

<b>Antal, L.</b>	802.1X WLAN Network Security .....
<b>Benda, O.</b>	Genetic Programming Based Haar-Like Feature Classifier Design .....
<b>Bláha, L.</b>	Analysis of Automated Generation of Signatures Using Honeypots .....
<b>Homoliak, I.</b>	Increasing Classification Accuracy in LibSVM Using String Kernel Functions .....
<b>Kalmár, R.</b>	Compiler of Agent High Level Language .....
<b>Klupal, O., Šimon, P.</b>	Plotter Merkur Alfi Controlled by FITkit Platform .....
<b>Korec, T.</b>	Comparison of Fingerprint Quality Estimation Algorithms .....
<b>Křen, M.</b>	Effective Production Planning and Scheduling .....
<b>Marek, J.</b>	Universal Unpacker of Executable Files .....
<b>Molák, J.</b>	Basestation for WSageNt Agent Platform with Using GSM Module .....

**Pazúriková, J.**

Adaptive Model for Simulation of Atmospheric Pollution .....

**Vician, T.**

Experiment with Swarm Inteligens in Robotic Simulator Vortex .....

**Žilka, L.**

Exploiting Publication References for Keyword Relatedness Assessment with Ex-  
plicit Semantic Analysis .....