

# EEICT 2009

## Obsah

### Předmluva

### Magisterské projekty

#### Elektronika a komunikace

##### Beneš, J.

Altitude Meter For RC Models .....

##### Beran, V.

Near Field of The Dipole Antennas .....

##### Bohutínský, J.

Control and Signalling Unit for Sport Match .....

##### Gotthans, T

GPS Logger - Hiking Computer .....

##### Harant, J.

Flight Statements Electronic Sensor .....

##### Jún, L.

Development Board With 32-bit ARM-Based Processor .....

##### Kejík, Z.

Models of EMC Filters .....

##### Kratochvíl, P.

Precise Frequency Generator - DDS .....

##### Marcoň, P.

LCD Graphical Module with Touchscreen .....

##### Mikulášek, T.

Dual-Band Antenna for Global Navigation Satellite System .....

##### Povalač, A.

Direct Digital Synthesis with AD9951 .....

##### Snopek, P.

Precise Function Generator .....

##### Ševčík, B.

Universal Interface for Control of Digital Potentiometers in Analog Systems .....

##### Šnajdr, V.

Experimental Meteostation .....

##### Šrámek, P.

System for Increasing Dynamics of the Signal Radiated by Magnetic Loop Antenna

### Zpracování signálů a obrazu

##### Bednarz, R.

Picture Quality Analysis in DVB-T Digital Television Systems .....

<b>Beneš, R.</b>	Road Signs Detection and Classification .....
<b>Blaho, J.</b>	Automatic Data Acquisition for Training of a Hand Detector .....
<b>Číp, P.</b>	Traffis Signs Detection and Recognition .....
<b>Ponzer, M.</b>	Face Detection and Recognition .....
<b>Pražák, O.</b>	Person Identification Based on Lokomotion .....
<b>Sucharda, J.</b>	Morphology of Stone Points .....
<b>Šrámek, P.</b>	Implementation of Software Defined Radio Into FPGA .....
<b>Váňa, J.</b>	Face Recognition by Thermal Image .....
<b>Vaněk, J.</b>	Music Genre Recognition .....

## Kybernetika a automatizace

<b>Babinec, T.</b>	3D Reconstruction Software Engine .....
<b>Dobias, M.</b>	Robust Controllers .....
<b>Dokoupil, J.</b>	Adaptive Controllers with Principles of Artificial Intelligence and Its Comparison with Classical Identificatins Methods .....
<b>Kočí, M</b>	Laser Proximity Scanner .....
<b>Veselý, I.</b>	Identification of Synchronous Motor's Parameters .....
<b>Vysloužil, O.</b>	Evaluation of Complex Situations from Airplane's Avionics .....
<b>Zlý, M.</b>	Automatic Range Switch for Fluke 792A .....

## Silnoproudá elektrotechnika a elektroenergetika

<b>Bucholcer, O.</b>	Program for the Calculation of Short-circuit Conditions in a Power System .....
<b>Hvězda, J.</b>	The Analyse of Transient Actions of Synchronous Generators .....
<b>Klečka, J.</b>	Wind Power Station With Savonius Rotor For Production Of Electric Power .....

- Ondroušek, L.**  
Connecting of the Photovoltaic Power Sources to the Distribution Grid .....
- Ptáček, M.**  
Optimalization of the Electricity Supply System Restoration during a Major Accident at the Dukovany Nuclear Power Station (EDU) .....
- Tomášek, P.**  
Safe Uninterruptible Power Supply of Power Plant Internal Consumption .....

## **Teoretická elektrotechnika, fyzika a matematika**

- Hruboš, Z.**  
Universal Voltage-Mode Third-Order Oscillator .....
- Mikláš, J.**  
Measurement of Biological Samples Aging by Light Polarisation State Changes ...
- Moravec, P.**  
Toolbox for the Cooperation of Matlab and External Simulation Programs .....
- Shromáždil, P.**  
Electronic Noise Temperature Dependence of Piezoceramic Sensors .....
- Šik, O.**  
Noise Characteristics Analysis Of Radiation Detectors .....

## **Mikroelektronika a technologie**

- Čech, O.**  
Impact of Magnesium Aditive on Alpha-Nickel Hydroxide Stability .....
- Feber, V.**  
Impedance Spectroscopy of Electrochemical Microsensors .....
- Frantík, O.**  
Rapid Thermal Annealing of Silicon Wafers .....
- Chroboček, M.**  
Creation of Case Studies for Statistical Data Analysis .....
- Kamenická, Z.**  
Measurement Uncertainty in Diagnostics of Insulating Materials .....
- Kledrowetz, V.**  
The Influence of MDAC Resolution on Basic Blocks of Pipelined AD Converter ..
- Košíková L.**  
Mathematical Transformation of Resorption Currents from Time to Frequency Domain .....
- Musílek, V.**  
Aprotic Electrolytes for Supercapacitors .....
- Sedláček, M.**  
Dielectric Nanocomposite Material .....
- Smetana, M.**  
Universal Test SW for Fire Panel Tester .....

<b>Široký, D.</b>	
	Remote Operated Probe for Deep-water Cave Exploration .....
<b>Šulc, J.</b>	
	Design of Electrochemical Sensors Array .....
<b>Vítek, L.</b>	
	Universal Fire Panel Tester .....

## **Informační systémy**

<b>Dolíhal, L.</b>	
	Syntax analysis based on several methods .....
<b>Genčür, M.</b>	
	A Framework for Dynamic Updating of Java-Based Applications .....
<b>Kroustek, J.</b>	
	Code Analysis and Transformation To a High-Level Language .....
<b>Mináč, J.</b>	
	GPS Navigation System for Cement Technology .....
<b>Řezáč, J.</b>	
	Software development processes improvement .....
<b>Solár, P.</b>	
	Syntax-directed Translation Based on Deep Pushdown Automata .....
<b>Šebek, M.</b>	
	Data Preprocessing for Data Mining System .....
<b>Tomek, J.</b>	
	Processor of TSQL2 on Relational Database System .....
<b>Verner, J.</b>	
	Software Development Processes Metrics .....

## **Grafika a multimédia**

<b>Bařina, D.</b>	
	Still Image Compression Using Wavelets and SPIHT Algorithm .....
<b>Kajan, R.</b>	
	MoonGate: Multipurpose RTS Engine for Windows and Xbox 360 .....
<b>Šolony, M.</b>	
	Camera-Projector System Automatic Calibration .....
<b>Zelený, J.</b>	
	Rivers and Lakes in Artificial Landscape .....

## **Počítáčové systémy**

<b>Kajan, M.</b>	
	Optimization of Crossproduct-Based Classification Algorithms .....
<b>Korček, P.</b>	
	PCI Express Bridge .....

## **Inteligentní systémy**

- Filák, J.**  
Evolutionary Optimization of Tour Timetables .....
- Horáček, J.**  
Platform for mobile agents in wireless sensor networks .....
- Martinský, O.**  
Simulation and Optimization of Automated Trading Strategies .....
- Marvan, A.**  
Robot for Minisumo .....
- Mézl, M.**  
Bayesian Methods for Data Mining .....
- Skydánek, L.**  
Tool for Modelling and Simulation of Technological Processes .....
- Valenta, V.**  
Advanced Elliptic Partial Differential Equations Solution .....
- Vyvial, P.**  
Acceleration of Healing Assurance of Concurrent Java Programs by Library Preprocessing .....