Proposal themes for dissertation paper
Master EMBEDDED SYSTEMS

2012-2013

No.	Coordinator	Theme title
1.	Prof.dr.ing. Lucian VINTAN	Interfacing an Automatic Design Space Exploration Framework with Multicore Simulators (Parallel Applications)
2.	Prof.dr.ing. Daniel VOLOVICI	Environmental applications of document clustering
3.		Game development environment (artificial life)
4.		Kinect technology applications for GDI
5.		Gesture detection
6.	Prof.dr.ing. Ioan P. MIHU	Digital filters (FIR and IIR) implementation using fixed point data.
7.		Digital filters (FIR and IIR) implementation on Digital Signal Processor.
8.	Conf.dr.ing. Ioan Z. MIHU	Design, test and optimization of embedded applications on C166 hardware platform
9.		Design of a real time kernel for 16 bit microcontrollers of C166 family
10.		Networking in automotive
11.	conf.dr.ing. C-tin BĂLĂ-ZAMFIRESCU	Simulation and optimization of manufacturing execution systems
12.		Manufacturing control systems: implementation on the FESTO line
13.	Conf. dr. ing. Remus BRAD	WLAN monitoring software
14.	Conf.dr.ing. Macarie BREAZU	Remote controlled robot using a video camera
15.		Chess board with move detection
16.	Conf.dr.ing. Cornel RENTEA	Discrete Control Systems Analysis. Control action from P.I.D simulation
17.		Block Representation of M.I.M.O Control Systems
18.	Conf. dr. ing. Dorin SIMA	Wireless sensor network http://en.wikipedia.org/wiki/Wireless_sensor_network http://www.sunspotworld.com/docs/ http://sensor.network.com/rest/faqs.jsp
19.		Web of Things with Sun SPOTs http://sunspotworld.com/S314730_Sun_SPOTs_Web_Of_Things/index.html
20.		Wireless ad hoc network http://en.wikipedia.org/wiki/Wireless_ad_hoc_networks http://en.wikipedia.org/wiki/List_of_ad_hoc_routing_protocols http://www.ipd.uni-karlsruhe.de/KSN/ http://compnetworking.about.com/cs/wirelessfaqs/f/adhocwireless.htm
21.		WebServices for Devices http://ws4d.e-technik.uni-rostock.de/2010/ws4d-jmeds-port-for-sunspots/ http://www.sunspotworld.com/
22.	S.l.dr. ing. Daniel MORARIU	Simulation the scheduling algorithms in a microcontroller with RTOS.
23.		Pattern recognition using neural networks implemented into microcontroller.
24.	S.l.ing. Horia CAPRITA	Mobile application
25.		GPS module controlled by MCU
26.		MCU scalable interconnection network using C167CS and CAN protocol
27.		MCU PIC18X development board with ICSP (in-circuit serial programming) and bootloader
28.	Asist. dr. ing. Arpad GELLERT	Thermal analysis of microarchitectures with selective value predictor

Head of Department,

Professor Daniel VOLOVICI, PhD

Responsible proposal themes,

associate professor Remus BRAD, PhD