

23. ТЕЛЕКОМУНИКАЦИОНИ ФОРУМ
23rd TELECOMMUNICATIONS FORUM

ТЕЛФОР 2015

TELFOR 2015



TELFOR

ПРОГРАМ

PROGRAM

Београд, 24 и 25. новембар 2015. године
Belgrade, 24 and 25 November 2015

Сава Центар
THE SAVA CENTER

WEB АПЛИКАЦИЈА И ЛОГИСТИЧКА ПОДРШКА

WEB Application and Logistic

ETF Beograd

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**Друштво за
телекомуникације
1992-2015
ТЕЛФОР 1993-2015**

**Telecommunications
Society
1992-2015
TELFOR 1993-2015**

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Prof. Dr Miroslav Lutovac, Software Tools and Applications
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Prof. Dr Milka Potrebić, Student Section

TIME TABLE
Telecommunications Forum TELFOR 2015

24th November, Tuesday Morning

9:00 Start of registration - Registration desk, Sava Center , Main Hall

10:30 – 12:00 OPENING CEREMONY - Rooms 1 + 1a + 16 /0

12:00 – 13:00 Welcome Party - Sava Center Restaurant

24th November, Tuesday Afternoon

Room Time	3/1	4/1	5/1	6/1	2/0	3/0
14:30-16:45	PRS 1 1.1-1.5	Commercial Presentations	RC 1 3.1-3.5	SP 1 5.1-5.8	TN 1 2.1-2.7	MM 1 8.1-8.7
17:00-19:15	PRS 2 1.6-1.11		RC 2 3.6-3.11	S 1 10.1-10.6	TN 2 2.8-2.15	MM 2 8.8-8.14

Room Time	1/0	1a/0	16/0			9a/0
14:30-16:45	14h NOKIA, 15h HUAWEI 16h VIP	CS 1 4.1-4.6	STA 1 9.1-9.7			15h IEEE Seminar
17:00-19:15		CS 2 4.7-4.12	STA 2 9.8-9.14			

25th November, Wednesday Morning

Room Time	3/1	4/1	5/1	6/1	2/0	3/0
8:30-10:45	AEL 1 7.1-7.7		RC 3 3.12-3.17	SP 2 5.9-5.15	TN 3 2.16-2.22	MM 3 8.15-8.23
11:00-13:15	AEL 2 7.8-7.14		RC 4 3.18-3.24	SP 3 5.16-5.23	AEM 1 6.1-6.7	MM 4 8.24-8.30

Room Time	1/0	1a/0	16/0			9a/0
8:30-10:45	10h VLATACOM 11h TELEKOM 12h IBIS Instruments	CS 3 4.13-4.19	STA 3 9.15-9.22			11h CS Tutorial
11:00-13:15			STA 4 9.23-9.30			

25th November, Wednesday Afternoon

Room Time	3/1	4/1	5/1	6/1		3/0
14:30-16:45	AEL 3 7.15-7.21		AEM 2 6.8-6.13	SP 4 5.24-5.31		14:30h SAGA 15h TELEKOM
17:00-19:15			AEM 3 6.14-6.20	SP 5 5.32-5.39		16h Project Management

Room Time	1/0	1a/0	16/0	Japan Salon/1		
14:30-16:45	16h MTEL Montenegro	CS 4 4.20-4.26	STA 5 9.31-9.35			
17:00-19:15		STA 7 9.43-9.48	STA 6 9.36-9.42	14-19 h RSNOG conference		

(Please see detailed programs)

Section 1 Policy, Regulatory Aspects and Services in Communications
 Section 2 Telecommunications Networks
 Section 3 Radio Communications
 Section 4 Communications Systems
 Section 5 Signal Processing
 Section 6 Applied Electromagnetics
 Section 7 Applied Electronics
 Section 8 Multimedia
 Section 9 Software Tools and Applications
 Section 10 Student Section

Room 3/1
 Room 2/0
 Room 5/1
 Room 1a/0
 Room 6/1
 Room 2/0, 5/1
 Room 3/1
 Room 3/0
 Room 16/0, 1a/0
 Room 6/1

- Room 1/0 – Special Sections: Leading international and domestic companies presentations
- Sava Center Main Hall - Exhibitions
- Room 9a/0 – Public Relation Контакт сала, састанци
- Room 9b/0 – IEEE Seminar, SC Tutorial

САТНИЦА

Телекомуникациони форум ТЕЛФОР 2015

24 новембар, уторак пре подне

9:00 Почетак регистрације учесника - регистрациони пулт, хол Сава центра

10:30 – 12:00 СВЕЧАНО ОТВАРАЊЕ - Сале 1 + 1а + 16 /0

12:00 – 13:00 Коктел добродошлице, Ресторан Сава центра

24 новембар, уторак после подне

Сала Време	3/1	4/1	5/1	6/1	2/0	3/0
14:30-16:45	ПРУ 1 1.1-1.5	Комерцијалне презентације	РК 1 3.1-3.5	ОС 1 5.1-5.8	ТМ 1 2.1-2.7	ММ 1 8.1-8.7
17:00-19:15	ПРУ 2 1.6-1.11		РК 2 3.6-3.11	С 1 10.1-10.6	ТМ 2 2.8-2.15	ММ 2 8.8-8.14

Сала Време	1/0	1а/0	16/0			9а/0
14:30-16:45	14ч NOKIA, 15ч HUAWEI 16ч VIP	СПС 1 4.1-4.6	САА 1 9.1-9.7			15ч IEEE Seminar
17:00-19:15		СПС 2 4.7-4.12	САА 2 9.8-9.14			

25. новембар, среда пре подне

Сала Време	3/1	4/1	5/1	6/1	2/0	3/0
8:30-10:45	ПЕЛ 1 7.1-7.7		РК 3 3.12-3.17	ОС 2 5.9-5.15	ТМ 3 2.16-2.22	ММ 3 8.15-8.23
11:00-13:15	ПЕЛ 2 7.8-7.14		РК 4 3.18-3.24	ОС 3 5.16-5.23	ПЕМ 1 6.1-6.7	ММ 4 8.24-8.30

Сала Време	1/0	1а/0	16/0			9а/0
8:30-10:45	10ч VLATACOM 11ч ТЕЛЕКОМ 12ч IBIS Instruments	СПС 3 4.13-4.19	САА 3 9.15-9.22			11ч SPS Tutorial
11:00-13:15			САА 4 9.23-9.30			

25. новембар, среда после подне

Сала Време	3/1	4/1	5/1	6/1		3/0
14:30-16:45	ПЕЛ 3 7.15-7.21		ПЕМ 2 6.8-6.13	ОС 4 5.24-5.31		14:30ч SAGA 15ч TELEKOM
17:00-19:15			ПЕМ 3 6.14-6.20	ОС 5 5.32-5.39		16ч Projektant- ska sekcija

Сала Време	1/0	1a/0	16/0	Јапански салон/1		
14:30-16:45	16h МТЕЛ ЦГ	СПС 4 4.20-4.26	САА 5 9.31-9.35	14-19 ч RSNOG konferencija		
17:00-19:15		САА 7 9.43-9.48	САА 6 9.36-9.42			

(Видети програме у наставку)

Секција 1 Политика, регулатива и услуге у телекомуникацијама
Секција 2 Телекомуникационе мреже
Секција 3 Радио-комуникације
Секција 4 Системи преноса сигнала
Секција 5 Обрада сигнала
Секција 6 Примењена електромагнетика
Секција 7 Примењена електроника
Секција 8 Мултимедија
Секција 9 Софтверски алати и апликације
Секција 10 Студентска секција

Сала 3/1
Сала 2/0
Сала 5/1
Сала 1a/0
Сала 6/1
Сале 2/0, 5/1
Сала 3/1
Сала 3/0
Сале 16/0, 1a/0
Сала 6/1

- Сала 1/0 – Посебне секције водећих домаћих и интернационалних компанија и институција
- Централни хол Сава центра – Изложбе
- Сала 9a/0 – Контакт сала, састанци
- Сала 96/0 – IEEE семинар, СПС туториал

TELFOR 2015

СВЕЧАНО ОТВАРАЊЕ - Opening Ceremony

Уторак 24.11.2015. године, 10:30 часова

Tuesday 24th November, 2015, 10:30 a.m.

Сава Центар, Сале 1+1a+1b / *The Sava Center, Rooms 1+1a+1b*

ПЛЕНАРНА СЕДНИЦА - Plenary Session

Увод – Introduction

Поздравне речи - Welcome Messages

Признања – Recognitions

Излагања по позиву - Invited Presentations

Mika Usuitalo, Head of Technology

NOKIA

"INTERNET of THINGS IoT - INDUSTRY 4.0"

Srdjan Kostić, PhD,

ERICSSON Sweden

„ROAD TO 5G“

Завршне речи – Conclusions

Председник Управног одбора – *Chairman of the Steering Committee*

Проф. др Ђорђе Пауновић – *Prof. Dr George Paunović*

Коктел добродошлице – Welcome Reception

Домаћин– Host

Друштво за телекомуникације – *Telecommunications Society*

COMPANIES EXHIBITORS AT THE EXHIBITION
ФИРМЕ ИЗЛАГАЧИ НА ИЗЛОЖБИ

	Firma/Organization	Lokacija/Location
	IEEE SERBIA & MONTENEGRO SECTION	Registracioni pult <i>Registration Desk</i>
1	AKADEMSKA MISAO	A4
2	IRITEL a.d. BEOGRAD	A2
3	CIP NETWORKS d.o.o	A1
4	ROHDE & SCHWARZ	C1
6	MAXNET	A4
7	ERICOM	A3
8	FHCE kft	A5

COMMERCIAL PRESENTATIONS
КОМЕРЦИЈАЛНЕ ПРЕЗЕНТАЦИЈЕ

Компанија <i>Company</i>	Дан <i>Day of the week</i>	Датум <i>Date</i>	Време <i>Time</i>	Сала <i>Room</i>
AD consulting d.o.o.	Уторак/Tuesday	24.11.	13:00-13:45	4/1
IRITEL	Уторак/Tuesday	24.11	14:00-14:45	4.1

OTN/DWDM платформа OTP100G IRITEL Капацитивне пробе батерија коришћењем
система за даљински надзор и управљање

OTN/DWDM Platform OTP100G IRITEL

Battery Capacity Testing using System for Remote Monitoring & Control

SPECIAL EVENTS PROGRAM
ПРОГРАМ ПОСЕБНИХ ДОГАЂАЈА

SPECIAL SESSIONS FOR COMPANIES
ПОСЕБНЕ СЕКЦИЈЕ КОМПАНИЈА

- *November 24, Tuesday afternoon / 24. Новембар, уторак после подне*

14:00-14:55 NOKIA – Nokia Solutions and Networks Serbia d.o.o.

Topic/Тема: „IoT - Industry 4.0“

Presenter/Предавач: Mika Uusitalo, NOKIA

Topic/Тема: „Telco Cloud“

Presenter/Предавач: Miikka Karhuluoma, NOKIA

15:00-15:55 HUAWEI

Topic/Тема: „Primena LTE širokopojsnih tehnologija u sistemima javne bezbednosti – PPDR

Presenter/Предавач: Ivana Dubljanin, Huawei

16:00- 16:55 VIP

Topic/Тема: „World's First Fully Virtualized VoLTE Solution “

Presenter/Предавач: Mirna Korać, VIP Mobile

- *November 25, Wednesday morning / 25. Новембар, среда пре подне*

10:00-10:55 VLATACOM

Topic/Тема: „Izazovi u projektovanju HF radara“

Presenter/Предавач: Vladimir Orlić, VLATACOM

Topic/Тема: „Nova generacija multisenzorskih kamera“

Presenter/Предавач: Dragana Perić, VLATACOM

11:00-11:55 TELEKOM SRBIJA

Topic/Тема: "Moderne radio komunikacije"

Presenters/Предавачи: Jelena Milinković, Milica Popović, TELEKOM Srbija

12:00-12:55 IBIS INSTRUMENTS

Topic/Тема: "Ibis Instruments Big Data Platforma"

Presenter/Predavač: Bojan Pavlović, Ibis Instruments

- *November 26, Wednesday afternoon / 26. Новембар, среда после подне*

16:00-16:55 M:TEL Crna Gora

Topic/Тема: "Novi pravci razvoja kompanije M:TEL Crna Gora"

Presenter/Predavač: Vladimir Lučić, M:TEL

SALA 3/0 / SALA 3/0

TECHNICAL AND INFORMATION PRESENTATIONS **ТЕХНИЧКЕ И ИНФОРМАЦИОНЕ ПРЕЗЕНТАЦИЈЕ**

• *November 25, Wednesday afternoon / 25. Новембар, sreda posle podne*

14:30-14:55 SAGA new frontier group

Topic/Тема: Juniper SDN & NFV rešenje - sve što ste želeli da znate, a niste imali koga da pitate

Presenter/Предавач: Jelena Pilić, SAGA

15:00-15:55 TELEKOM SRBIJA

Topic/Тема: "Poslovna rešenja Telekom Srbija"

Presenter/Предавач: Ivan Luković, TELEKOM Srbija

16:00-16:55 Tehnička prezentacija po pozivu

Topic/Тема: PRAKSA PROJEKTOVANJA TELEKOMUNIKACIONIH MREŽA I SISTEMA U OBJEKTIMA

Presenter/Предавач: Mirjana Jarić-Čirić i dr.

EXHIBITION/ ИЗЛОЖБА

PTT „Serbia“, PTT Museum / ПТТ „Србија“, Музеј ПТТ

„160 година телеграфа у Србији“

„160 years of the telegraph in Serbia“

THE SAVA CENTER MAIN HALL / Главни хол САВА ЦЕНТРА

IEEE SEMINAR

(recommended for students and young engineers)

Body Language in Business

*Trainer Dr. Kurt Richter Emeritus Professor of Electrical Engineering
University of Technology Graz, Austria*

Tuesday 24.11. 15:00h, Room 9b/0

(free participation)

Language: English

Time: approx. 2-3 hours

Target Group: Engineering students and young engineers

Participants: Optimum 30 participants

Communications Systems TUTORIAL

Spectrum Sensing on Wireless Networking Testbeds:

A Practical Demonstration

Authors:

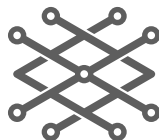
Nenad Milosevic, Zorica Nikolic, Filip Jelenkovic, Valentina Nejkmovic, Milorad Tomic

Wednesday 25.11. 11:00-13:15h, Room 9b/0

(free participation)

Abstract:

This tutorial will be of interest to all those who wish to better understand what wireless networking testbeds can offer to the general communications and computing research community as well as telecommunications industry. This tutorial will give basic practical examples how we can experiment in such environments. The tutorial focuses on using OMF, a resource management, experiment control, and measurement framework to define and conduct experiments on a FLEX testbed. The attendees will be guided through hands-on experimenting to demonstrate the basics of the spectrum sensing and the WiFi networks performance measurement including spectrum sensing of the WiFi unlicensed band and performance measurement of the WiFi communication with and without interference.



RSNOG

Grupa mrežnih
operatora Srbije

Prva RSNOG konferencija

25. novembar 2015.

Sava centar, Japanski salon

PROGRAM

14.00 Otvaranje

14.10 Prezentacije

Plan razvoja IPv6 mreže na primeru Akademske mreže Univerziteta u Nišu
Vladimir Simić, JUNIS

DNS rutiranje i CDN-ovi

Nenad Krajnović, Elektrotehnički fakultet u Beogradu

Postoji li potreba za nacionalnim Cloud federacijama?

Boško Radivojević, Mainstream

Routing politike

Zoran Perović, Serbian Open eXchange

Carrier-Grade NAT – iskustva i problemi

Milan Anđelković, Radijus vektor

Hibridno rešenje za DDoS zaštitu

Peđa Radoičić, Telenor

16.40 Pauza / posluž enje

17.00 Diskusija: „Open Networking u praksi”

Prezentacija: Bare-Metal Switching – iskustva iz prakse

Goran Slavić, Serbian Open eXchange

Učestvuju: Mina Tomić, VIP mobile, Petar Bojović, Računarski fakultet, Goran Slavić, Serbian Open eXchange



RIPE NCC
RIPE NETWORK COORDINATION CENTRE



RNIDS
Registar nacionalnog
internet domena Srbije

ПРОГРАМ АУТОРСКИХ СЕКЦИЈА

AUTHOR SECTIONS' PROGRAM

СЕКЦИЈА 1: ПОЛИТИКА, РЕГУЛАТИВА И УСЛУГЕ У ТЕЛЕКОМУНИКАЦИЈАМА (ПРУ) TELECOMMUNICATIONS POLICY, REGULATORY ASPECTS AND SERVICES (PRS)

ПРУ 1 - Уторак, 24.11.2015. године у 14:30 - сала 3/1
PRS 1 - Tuesday, 24.11.2015, 14:30 – Hall 3/1

Председавајући: НАТАША ГОСПИЋ и ВЛАДИЦА ТИНТОР
Chairpersons: NATAŠA GOSPIĆ and VLADICA TINTOR

- 1.1. Andrey V. Chernov, Maria A. Butakova, Ekaterina V. Karpenko: **Security Incident Detection Technique for Multilevel Intelligent Control Systems on Railway Transport in Russia**
- 1.2. Mihai Banica: **Organization Design for Network Related Managed Services**
- 1.3. Nataša Banović-Čurguz, Dijana Ilišević: **Towards Customers & Service Oriented Mobile Service Providers**
- 1.4. Dijana Ilišević, Nataša Banović-Čurguz: **Evolution toward digital society in B&H**
- 1.5. Nexhat Kapidani, Enis Kočan: **Implementation of National Maritime Single Window in Montenegro**

ПРУ 2 - Уторак, 24.11.2015. године у 17:00 - сала 3/1
PRS 1 - Tuesday, 24.11.2014+5, 17:00 – Hall 3/1

Председавајући: МИЛИЦА ПЕЈАНОВИЋ-ЂУРИШИЋ и ВЛАДО ДЕЛИЋ
Chairpersons: MILICA PEJANOVIĆ-DJURIŠIĆ and VLADO DELIĆ

- 1.6. Sadko Mandžuka, Pero Škorput, Miroslav Vujić: **Arhitektura kooperativnih sustava u prometu i transportu**
- 1.7. T. Bubalo, H. Vojvodić, D. Bokulić: **Razmjena prometnih podataka u međugradskom autobusnom prometu**
- 1.8. Zorica Lepasavić, Marijana Vukašinović: **Parametri efikasnosti kontakt centra**
- 1.9. Dragan R. Mijić: **Razvoj jedinica za upravljanje projektima (PMO) u organizacionom upravljanju projektima**
- 1.10. Snežana D. Šarboh, Slobodan I. Stojković: **Novootkriveni patentni Nikole Tesle**
- 1.11. Saša D. Zdravković, Snežana D. Šarboh: **Novi rezultati u otkrivanju patenata Mihajla Idvorskog Pupina**

СЕКЦИЈА 2: ТЕЛЕКОМУНИКАЦИОНЕ МРЕЖЕ (ТМ) TELECOMMUNICATIONS NETWORKS (TN)

ТМ 1 - Уторак, 24.11.2015. године у 14:30 - сала 2/0
TN 1 - Tuesday, 24.11.2015, 14:30 – Hall 2/0

Председавајући: АЛЕКСАНДРА СМИЉАНИЋ и НЕНАД КРАЈНОВИЋ

Chairperson: ALEKSANDRA SMILJANIĆ and NENAD KRAJNOVIĆ

- 2.1. Nataša Maksić, Aleksandra Smiljanić: **Routing Optimization in Data Center Networks** (*invited paper*)
- 2.2. Marija Antić, Aleksandra Smiljanić: **Optimization of Non-Blocking Packet Networks using Load Balanced Shortest Path Routing** (*invited paper*)
- 2.3. Jelena Seović, Saša Takov, Jelena Veličković, Aleksandra Smiljanić: **Network topology exchange between NetFPGA-10G and Quagga routing platforms**
- 2.4. Sonja Filiposka, Yuri Demchenko, Daniel Arbel, Anastas Mishev, Migiel de Vos, Tasos Karaliotas, Damir Regvart: **Enabling High Performing Cloud Computing Using Zero Touch Provisioning**
- 2.5. Roman V. Gridasov, Alexander A. Bakhtin, Alexander G. Timoshenko, Ilya V. Muravyev, Ksenia M. Lomovskaya, Olga P. Simonova, Oleg A. Mikhailov, Roman E. Fiodorov, Alexander S. Kryltsov: **Full Route Energy Cost Metric**
- 2.6. Radu Alexandru Badea, Eugen Borcoci: **Call-Delay Investigation in a Client-Content Server Environment**
- 2.7. Dejana Ugrenović, Gordana Gardašević: **CoAP protocol for Web-based monitoring in IoT healthcare applications**

ТМ 2 - Уторак, 24.11.2015. године у 17:00 - сала 2/0
TN 2 - Tuesday, 24.11.2015, 17:00 – Hall 2/0

Председавајући: МИЛАН БЈЕЛИЦА и ГОРАН МАРКОВИЋ

Chairperson: MILAN BJELICA and GORAN MARKOVIĆ

- 2.8. Cise Midoglu, Philipp Svoboda, Markus Rupp: **Modeling Indoor WLAN Performance Towards User-Oriented Evaluation Metrics**
- 2.9. Tatjana Kapus: **Analysing the Effect of CCA Duration in 802.15.4 Networks with Hidden Nodes by Using PRISM**
- 2.10. Madalina Oproiu, Alexandru Vulpe, Ion Marghescu: **Effects of Enabling Carrier Aggregation in a Mobile Operator Network**
- 2.11. Nemanja Zdravković: **Outage analysis in clustered cooperative networks over α fading channels**
- 2.12. Slavica Tomović, Igor Radusinović: **Performance analysis of a new SDN-based WSN architecture**
- 2.13. Predrag Vuletić: **Primena WSN-a u železničkom inteligentnom transportnom sistemu (RITS)**
- 2.14. Hrvoje Vojvodić, Tomislav Bubalo, Darko Bokulić: **Strojna razmjena (M2M) prometnih i putnih podataka**
- 2.15. Tomislav B. Unkašević, Miroslav V. Perić, Zoran Đ. Banjac: **O osetljivosti kriptografskih sistema**

ТМ 3 - Среда, 25.11.2015. године у 8:30 - сала 2/0
TN 3 - Wednesday, 25.11.2015, 8:30 – Hall 2/0

Председавајући: МИРЈАНА СТОЈАНОВИЋ и ЗОРАН ЧИЧА

Chairpersons: MIRJANA STOJANOVIĆ and ZORAN ČIČA

- 2.16. Kurt Richter: **A Brief Historic Review on Transatlantic Telecommunication – from transatlantic cables to satellite communication (*invited presentation*)**
- 2.17. Alen Begović, Namir Škaljo, Narcis Behlilović: **A simple model of copper local loop for use in current DSL applications**
- 2.18. Aleksandra Đorić, Nataša Maleš-Ilić, Aleksandar Atanasković: **Linearization of Microstrip RF Power Amplifier Loaded with the Broadband Matching Circuits for the Efficiency Maintenance**
- 2.19. Dinh Van Linh, Simona V. Halunga, Alexandru Vulpe: **Evaluation of coded OFDM systems using different type of codes**
- 2.20. Petr Mlynek, Jiri Misurec, Pavel Silhavy, Radek Fujdiak: **The Impact of Noise on Transmission Parameters in PLC Networks – Methodology for Evaluation of Power Line Communication**
- 2.21. Konstantin N. Lovtsov, Nikita S. Sukhov, Vladislav B. Tsekhansky, Andrei M. Sukhov: **Observaion of gravitational redshift in the telecommunications environment**
- 2.22. Nikita I. Vinogradov, Evgeny S. Sagatov, Andrei M. Sukhov: **Device for measuring one-way network delay with microsecond accuracy**

СЕКЦИЈА 3: РАДИО-КОМУНИКАЦИЈЕ (РК) RADIO COMMUNICATIONS (RC)

RK 1 - Уторак, 24.11.2015. године у 14:30 – сала 5/1
RC 1 - Tuesday, 24.11.2015, 14:30 – Hall 5/1

Председавајући: НАТАША НЕШКОВИЋ и БУРАЋ БУДИМИР

Chairperson: NATAŠA NEŠKOVIĆ and DJURADJ BUDIMIR

- 3.1. Savo Glišić: **Advanced Wireless Networks – 5G/6G Joint Design of Technology and Business Models (*invited paper*)**
- 3.2. Alexey Trushanin, Grigory Serebryakov, Mikhail Shashanov, Mikhail Shkerin, Roman Maslennikov: **Evaluation of Load Balancing in HSUPA**
- 3.3. Nikola Petrović, Dušan Savković: **LTE Performance in a Hybrid Indoor DAS (Active vs. Passive)**
- 3.4. Mladen Koprivica, Vladimir Slavković, Milica Popović, Jelena Milinković, Aleksandar Nešković: **Experimental Analysis of Duty Factor for WLAN User Devices**
- 3.5. Jevgenij Krivochiza, Jurgis Aleksandravicius, Rimvydas Aleksiejunas, Paulina Bauzyte, Vytautas Jonkus, Kestutis Svirkas: **MIMO Antenna Selection Analysis Based on QoS and Antenna Correlation Indicator Statistics**

PK 2 – Уторак, 24.11.2015. године у 17:00 - сала 5/1
RC 2 - Tuesday, 24.11.2015, 17:00 – Hall 5/1

Председавајући: АЛЕКСАНДАР НЕШКОВИЋ и ЗОРАН ВЕЉОВИЋ

Chairperson: ALEKSANDAR NEŠKOVIĆ and ZORAN VELJOVIĆ

- 3.6. Marija Z. Malnar, Nataša J. Nešković, Aleksandar M. Nešković: **Optimization of Routing Protocols and Metrics for Multi-Channel Multi-Interface Wireless Mesh Networks** (*invited paper*)
- 3.7. Luis Irio, Rodolfo Oliveira: **Interference Estimation in Wireless Mobile Random Waypoint Networks**
- 3.8. Majda Petrić, Aleksandar Nešković, Nataša Nešković: **Dynamic k Nearest Neighbours model for mobile user indoor positioning**
- 3.9. Vitomir Djaja-Josko, Jerzy Kolakowski: **UWB positioning system for elderly persons monitoring**
- 3.10. Jerzy Kolakowski, Vitomir Djaja-Josko, Ryszard Michnowski, Karol Radecki: **UWB wireless system for falling down detection**
- 3.11. Aleksandar V. Marković, Zoran H. Perić, Branimir S. Jakšić, Petar Lj. Spalević, Abdalmalik Amnisi: **Level Crossing Rate of SC Macrodiversity System with three SC Microdiversity Receivers over Shadowed α - κ - μ Fading Channel**

PK 3 – Среда, 25.11.2015. године у 8:30 - сала 5/1
RC 3 - Wednesday, 25.11.2015, 8:30 – Hall 5/1

Председавајући: МИЛИЦА ПЕЈАНОВИЋ-ЂУРИСИЋ и МИЛОШ БОРЕНОВИЋ

Chairperson: MILICA PEJANOVIĆ-DJURISIC and MILOŠ BORENOVIĆ

- 3.12. Igor A. Tomić, Milutin S. Davidović, Sanja M. Bjeković: **On the downlink capacity of LTE cell** (*invited paper*)
- 3.13. Lazar Berbakov, Marko Beko: **One Bit of Feedback Power Allocataion Algorithm for Collaborative Beamforming in Wireless Sensor Network**
- 3.14. M. Danilo Abrignani, Giulio Contino, Chiara Buratti, Roberto Verdone: **Fast-Deployment and Continuous Monitoring through REM: A Low-Cost Device Prototype**
- 3.15. M. Mehdawi, N. G. Riley, M. Ammar, A. Fanan, M. Zolfaghari: **Spectrum Occupancy Measurements and Lessons Learned in the Context of Cognitive Radio**
- 3.16. A. Fanan, N. Riley, M. Mehdawi, M. Anmmar, M. Zolfaghari: **Comparison of Spectrum Occupancy Measurements using Software Defined Radio RTL-SDR with a Conventional Spectrum Analyzer approach**
- 3.17. Mohamed Abdelmonem Abouelela, Marawan Mohamed Abouelela: **Wireless Communication Role in Home Energy Management System (HEMS)**

PK 4 – Среда, 25.11.2015. године у 11:00 - сала 5/1
RC 4 - Wednesday, 25.11.2015, 11:00 – Hall 5/1

Председавајући: ГОРАН МАРКОВИЋ и БРАНИСЛАВ ТОДОРОВИЋ

Chairperson: GORAN MARKOVIĆ and BRANISLAV TODOROVIĆ

- 3.18. Uglješa Urošević, Zoran Veljović: **Distribuirane MIMO tehnike u bežičnim senzorskim mrežama sa relejima**
- 3.19. Maja B. Rosić, Mirjana I. Simić, Predrag V. Pejović: **Određivanje optimalne lokacije predajnika u realnom radio kanalu**
- 3.20. N. Maletić, M. Čabarkapa, N. Nešković, A. Nešković, D. Budimir: **Uticaj nelinearnog releja na vjerovatnoću otkaza kooperativnog AF sistema**
- 3.21. Hana Stefanović, Dejan Milić: **Uticaj nelinearnosti pojačavača velike snage na degradaciju signala na satelitskom transponderu**
- 3.22. Uroš Pešović, Dušan Gliech, Peter Planinšič, Zoran Stamenković, Siniša Randić: **Implementation of coherent IEEE 802.15.4 receiver on software defined radio platform**
- 3.23. Jelena P. Davidović, Goran B. Marković: **Analiza hijerarhijskih protokola rutiranja u bežičnim senzorskim mrežama većih dimenzija u uslovima neidealne konektivnosti**
- 3.24. Selena Vukotić, Desimir Vučić: **Detekcija i klasifikacija OFDM/QAM i OFDM/OQAM signala na bazi ciklostacionarnih obeležja**

СЕКЦИЈА 4: СИСТЕМИ ПРЕНОСА СИГНАЛА (СПС) COMMUNICATIONS SYSTEMS (CS)

СПС 1 - Уторак, 24.11.2015. године у 14:30 - сала 1a/0
CS 1 - Tuesday, 24.11.2015, 14:30 – Hall 1a/0

Председавајући: НЕНАД МИЛОШЕВИЋ

Chairpersons: NENAD MILOŠEVIĆ

- 4.1. Hannes Toepfer, Elena Chervakova, Marco Goetze, Tino Hutschenreuther, Bojana Nikolić, Bojan Dimitrijević: **Application of Wireless Sensors Within a Traffic Monitoring System** (*invited paper*)
- 4.2. Zoran Golubičić: **Digital beam former for multibeam multistatic radar receiver** (*invited paper*)
- 4.3. Nenad Milošević, Zorica Nikolić, Filip Jelenković, Valentina Nejšković, Milorad Tošić, Ivan Šeškar: **Spectrum Sensing for the Unlicensed Band Cognitive Radio**
- 4.4. Vladimir R. Krstić, Bojan R. Dimitrijević, Miloš V. Bandur: **A Stochastic Whitening Algorithm with Time Variable Neuron Slope for Blind DFE**
- 4.5. Leontin Tuta, Alexandru Grivei, Ioan Nicolaescu, Madalina Moni: **Linear antenna array beamforming algorithm for coherent incident signals**
- 4.6. Madalina-Varvara Moni, Leontin Tuta: **Cylindrical Dielectric Resonator Antenna for Wireless Applications**

СПС 2 - Уторак, 24.11.2015. године у 17:00 - сала 1а/0
CS 2 - Tuesday, 24.11.2015, 17:00 – Hall 1a/0

Председавајући: ДЕЈАН ДРАЈИЋ

Chairpersons: DEJAN DRAJIĆ

- 4.7. Vesna M. Blagojević, Predrag N. Ivaniš: **Ergodic capacity of multi-antenna spectrum sharing cognitive radio with outdated CSI (*invited paper*)**
- 4.8. Marko Simeunović, Andrej Mihailović, Milica Pejanović-Djurišić: **Setting Up a Multi-Purpose Internet of Things System**
- 4.9. Tauseef Ahmed, Yannick Le Moullec: **Frequency and Power Allocation Schemes for Heterogeneous Networks including Femto Cells**
- 4.10. Kerem Ok, Vedat Coskun, Cem Cevikbas, Busra Ozdenizci: **Design of a Key Exchange Protocol between SIM Card and Service Provider**
- 4.11. David Todoli-Ferrandis, Salvador Santonja-Climent, Victor Sempere-Paya, Javier Silvestre-Blanes: **RPL Routing in a real life scenario with an energy efficient objective function**
- 4.12. Marijana Vujović, Milan Savić, Dejan Stefanović, Ištvan Pap: **Upotreba NGINX i Websocket tehnologija u IoT primeni**

СПС 3 - Среда, 25.11.2015. године у 8:30 - сала 1а/0
CS 3 - Wednesday, 25.11.2015, 8:30 – Hall 1a/0

Председавајући: ГОРАН ЂОРЂЕВИЋ

Chairpersons: GORAN ĐORĐEVIĆ

- 4.13. Milica Petković: **Performance analysis of mixed RF/FSO systems (*invited paper*)**
- 4.14. Časlav Stefanović, Milica I. Petković, Bojana Nikolić, Goran T. Đorđević: **Effect of phase noise on error performance of DE-QPSK receiver over k - μ fading channel**
- 4.15. Aleksandra Popovska-Mitrovikj, Vladimir Ilievski, Verica Bakeva: **Performances of Random Codes Based on Quasigroups for transmission of audio files**
- 4.16. Jan Broulim, Pavel Broulim, Jan Moldaschl, Vjačeslav Georgiev, Radek Šalom: **Fully parallel FPGA decoder for irregular LDPC codes**
- 4.17. Stefan Scholl, Norbert Wehn: **Efficient Architectures for Parity Check Matrix Generation**
- 4.18. Maja Delibašić, Milica Pejanović-Đurišić: **Non-Regenerative Cooperative Relaying in Precise Agriculture Communication Platform**
- 4.19. Časlav M. Stefanović: **Macrodiversity System with Macrodiversity SSC Receiver and two SC Microdiversity Receivers in the presence of Composite Fading Environment**

СПС 4 - Среда, 26.11.2014. године у 14:30 - сала 1а/0
CS 4 - Wednesday, 26.11.2014, 14:30 – Hall 1a/0

Председавајући: ЗОРАН ЧИЧА

Chairpersons: ZORAN ČIČA

- 4.20. Milorad Tošić, Valentina Nejković, Filip Jelenković, Nenad Milošević, Zorica Nikolić, Ivan Seskar: **The CoordSS experimentation framework ontologies**
- 4.21. Andrey D. Zolotuev, Frangiz G. Khisamov, Maksim V. Milovanov, Denis M. Sobachkin: **MC-DS-CDMA Pseudo-Noise Acquisition Algorithm Research Using Computer Model**
- 4.22. A. Oguz Kislal, Arda Demiray, Osman Ceylan, H. Bulent Yagci: **Implementation of a Software Defined FM Mixed Demodulator on FPGA**
- 4.23. Lukas Chruszczyk: **ATE for selected low frequency transmission parameters of a general 3-terminal element**
- 4.24. Estefania Etcheves Miciolino, Giuseppe Bernieri, Federica Pascucci, Roberto Setola: **Communications Network Analysis in a SCADA System Testbed Under Cyber-Attacks**
- 4.25. Alen Hodžić, Edin Mujčić: **Teleoperation System Control Based on The Method for Supervisory Control With Variable Time Delay**
- 4.26. A. Filippou, D. A. Karras, I. Tsatrafyllis: **On the Detailed Design Issues of a Multi-Agent Architecture based on CUDA threads towards efficiently Simulating WSN Systems**

СЕКЦИЈА 5: ОБРАДА СИГНАЛА (ОС) SIGNAL PROCESSING (SP)

ОС 1 - Уторак, 24.11.2015. године у 14:30 - сала 6/1
SP 1 - Tuesday, 24.11.2015, 14:30 – Hall 6/1

Rekonstrukcija signala / Signal reconstruction

Председавајући: ИРЕНА ОРОВИЋ и VENCESLAV KAFEDZISKI

Chairpersons: IRENA OROVIĆ and VENCESLAV KAFEDZISKI

- 5.1. Predrag R. Tadić, Željko M. Đurović, Aleksandra Lj. Marjanović, Sanja M. Vujnović: **Fault diagnosis in nonlinear stochastic systems via particle filtering (*invited paper*)**
- 5.2. Rostislav I. Sokolov, Renat R. Abdullin: **Research of Quality of Nonlinear Markov Filtering RGB Signal in Conditions of Gaussian and non-Gaussian Noise**
- 5.3. Venceslav Kafedziski, Slavche Pejovski: **Compressed Sensing MRI Using Nonseparable Shearlet Transform and Split Bregman Algorithm**
- 5.4. Slavche Pejovski, Venceslav Kafedziski: **Simplified Analysis of Orthogonal Matching Pursuit Performance in Compressed Sensing**
- 5.5. Isidora Stanković, Andjela Draganić: **Compressive Sensing Reconstruction of Video Data based on DCT and Gradient-Descent Method**
- 5.6. Andjela Draganić, Irena orović, Srdjan Stanković: **Compressive Sensing Least Square problem solution suitable for implementation**
- 5.7. Andjela Draganić, Irena Orović, Srdjan Stanković: **Robust Hermite transform based on the L-estimate principle**
- 5.8. Miloš Brajović, Irena Orović, Miloš Daković, Srdan Stanković: **The Analysis of Missing Samples in Signals Sparse in the Hermite Transform Domain**

OC 2 - Среда, 25.11.2015. године у 8:30 - сала 6/1
SP 2 - Wednesday, 25.11.2015, 8:30 – Hall 6/1

Filtriranje / Filtering

Председавајући: БИЉАНА СТОШИЋ и ЈЕЛЕНА ЋЕРТИЋ

Chairpersons: BILJANA STOŠIĆ and JELENA ČERTIĆ

- 5.9. Milan R. Dinčić, Zoran H. Perić, Dragan B. Denić: **Designing Quantizers for Coding Signals with Fixed and Variable Codeword Length (*invited paper*)**
- 5.10. Maksim Butsenko, Tonu Trump: **An Affine Combination of Adaptive Filters for Sparse Impulse Response Identification**
- 5.11. Vladimir Marchuk, Sergey Makov, Dmitry Timofeev, Marina Pismenskova, Alexandr Fisunov: **A method of signal estimation error reduction in a priori indeterminacy**
- 5.12. Bojan D. Banjac, Marija V. Nenezić, Branko J. Malešević: **Some applications of λ -method for obtaining approximation in filter design**
- 5.13. Biljana P. Stošić, Vlastimir D. Pavlović, Dejan N. Milić: **Novel Selective CIC Filter Functions with Improved Magnitude Response Characteristics**
- 5.14. Milica Lj. Katić, Jelena D. Čertić: **Multi-stage Comb based Decimation Filter**
- 5.15. Nikola Andrić, Milan Rusić, Robert Pečkai-Kovač, Jelena Kovačević: **Implementacija DSP modula za upravljanje niskofrekventnim sadržajem**

OC 3 - Среда, 25.11.2015. године у 11:00 - сала 6/1
SP 3 - Wednesday, 25.11.2015, 11:00 – Hall 6/1

Estimacija i prepoznavanje / Estimation and recognition

Председавајући: ДРАГАНА ШУМАРАЦ-ПАВЛОВИЋ и МИЛОРАД ПАСКАШ

Chairpersons: DRAGANA ŠUMARAC-PAVLOVIĆ and MILORAD PASKAŠ

- 5.16. Ivan D. Jokić, Stevan D. Jokić, Vlado D. Delić, Zoran H. Perić: **Mel-Frequency Cepstral Coefficients as Features for Automatic Speaker Recognition (*invited paper*)**
- 5.17. Tijana Delić, Simona Đurić, Slobodan Jošić: **Poređenje ljudskog i automatskog prepoznavanja govornika u slučaju imitacija**
- 5.18. Vojislav Z. Lukić, Aleksej Makarov, Guowei Tao, Bhaskar Choubey: **Vehicle Speed Estimation From Tracking License Plates**
- 5.19. Stefan Mijić, Ivan Mezei, Rastislav Struharik: **IP Cores 2D Direct and Inverse Discrete Cosine Transformation**
- 5.20. Cosmin Danisor, Gianfranco Fornaro, Mihai Datcu: **Comparative Study of SAR Tomographic Reconstruction Algorithms**
- 5.21. Abdulrazzaq Muhammad B., Ahmed Mohammed Z., Davey Paul: **Concatenated 2D SOVA for Two Dimensional Maximum Likelihood Detection**
- 5.22. Branimir Vasić, Stanislav Očovaj, Darko Lauš, Željko Lukač: **Optimizacija H.264 video dekodera iz Android OS za MIPS32 DSP ASE arhitekturu**
- 5.23. Francesca Murgia, Daniele Giusto, Cristian Perra: **3D Reconstruction from Plenoptic Image**

OC 4 - Среда, 25.11.2015. године у 14:30 - сала 6/1
SP 4 - Wednesday, 25.11.2015, 14:30 – Hall 6/1

Obrada biomedicinskih signala / Biomedical signal processing

Председавајући: МИРЈАНА ПОПОВИЋ и МИЛИЦА ЈАНКОВИЋ

Chairpersons: MIRJANA POPOVIĆ and MILICA JANKOVIĆ

- 5.24. Andrej M. Savić, Mirjana B. Popović: **Brain Computer Interface Prototypes for Upper Limb Rehabilitation: a Review of Principles and Experimental Results** (*invited paper*)
- 5.25. Vera Miler Jerković, Vladimir Kojić, Mirjana B. Popović: **Linear Discriminant Analysis: Classification of On-Surface and In-Air Handwriting**
- 5.26. Eva Tuba, Nebojša Bačanić: **An Algorithm for Handwritten Digit Recognition Using Projection Histograms and SVM Classifier**
- 5.27. Branislav Gerazov, Philip N. Garner: **An Investigation of Muscle Models for Physiologically Based Intonation Modelling**
- 5.28. Aleksandra Arsić, Miloš Jordanski, Milan Tuba: **Improved Lip Detection Algorithm Based on Region Segmentation and Edge Detection**
- 5.29. Vladimir Ostojić, Djordje Starčević, Vladimir Petrović: **Detection of collimation field in digital radiography using Frobenius norm of Hessian**
- 5.30. Milica M. Janković, Milorad P. Paskaš, Ana Koljević Marković: **Fractal Dimension of Time-Activity Curves in Dynamic Parathyroid Scintigraphy**
- 5.31. Branka Stojanović, Aleksandar Nešković, Oge Marques: **Fingerprint ROI Segmentation Using Fourier Coefficients and Neural Networks**

OC 5 - Среда, 25.11.2015. године у 17:00 - сала 6/1
SP 5 - Wednesday, 25.11.2015, 17:00 – Hall 6/1

Senzorske mreže / Sensor networks

Председавајући: ГОРАН ДИМИЋ и ЈЕЛЕНА ЈАНКОВИЋ

Chairpersons: GORAN DIMIĆ and JELENA JANKOVIĆ

- 5.32. Slaviša Tomić, Marko Beko, Rui Dinis, Lazar Berbakov: **Cooperative Localization in Wireless Sensor Networks Using Combined Measurements**
- 5.33. Marko Beko, Rui Dinis, Goran Dimić, Milan Tuba, Paulo Montezuma: **A Geodesic Descent Technique for PAPR Reduction in MIMO-OFDM**
- 5.34. Miladin Jovanović, Dejan Čotra, Radisav Stamenković, Velibor Ilić: **Programska implementacija sistema za prikupljanje i obradu signala sa elektronskih kontrolnih jedinica u automobilske mreže**
- 5.35. Alexandru Amaricai, Oana Boncalo, Ioana Mot: **Memory efficient FPGA implementation for flooded LDPC decoder**
- 5.36. Velibor Škobić, Nebojša Pjevalica, Miloš Nikolić: **Verification of Frequency Analysis Experimental Setup**
- 5.37. Jelena Janković, Miloš Subotić, Vladimir Marinković: **One Solution of the Accurate Summation Using Fixed-point Accumulator**
- 5.38. Pavel Fiala, Richard Linhart: **High efficient Carrier Phase Synchronization for SDR Using CORDIC implemented on an FPGA**
- 5.39. Davor Doder, Nenad Četić, Miroslav Popović, Jelena Kovačević: **Realisation of server application for acoustic sensors based on RTSP, RTP protocols**

СЕКЦИЈА 6: ПРИМЕЊЕНА ЕЛЕКТРОМАГНЕТИКА (ПЕМ) APPLIED ELECTROMAGNETICS (AEM)

ПЕМ 1 - Среда, 25.11.2015. године у 11:00 - сала 2/0
AEM 1 - Wednesday, 25.11.2015, 11:00 – Hall 2/0

Председавајући: АНА ЈОВАНОВИЋ и БРАНКО КОЛУНДЖИЈА

Chairpersons: ANA JOVANOVIĆ and BRANKO KOLUNDŽIJA

- 6.1. Snežana Lj. Stefanovski Pajović, Milka M. Potrebić, Dejan V. Tošić: **Microwave Bandpass and Bandstop Waveguide Filters Using Printed-Circuit Discontinuities (*invited paper*)**
- 6.2. Naser Ojaroudiparchin: **Low-Cost Planar MM-Wave Phased Array Antenna for Use in Mobile Satellite (MSAT) Platforms**
- 6.3. D. Palessonga, M. El Gibari, S. Ginestar, H. Terrisse, B. Guiffard, A. Kassiba, H. W. Li: **Tuning of Microwave and Optical Properties of the Electro-Optic Polymer PMMA-DR1 by Loading with SiC Nanoparticles for Optimization of Photonic Microwave Components**
- 6.4. Vasily Yu. Kozhevnikov, Vladimir Yu. Konev, Alexey I. Klimov: **Coherent radiation summation of two X-band nanosecond Gunn oscillators synchronized by a modulating pulse**
- 6.5. J. Bjelica, N. Djurić, D. Kljajić, M. Milutinov, A. Fanti: **The Boundary Exposure Assessment for Continuous Monitoring of the Low-Frequency EMF**
- 6.6. M. Zolfaghari, N. G. Riley, M. Mehdawi, A. Fanan, M. Ammar, F. Meng: **Quality Measurements of an UWB Reduced-size CPW-fed Aperture Antenna**
- 6.7. Ana Jovanović, Luka Lazović, Vesna Rubežić: **Prilagođenje dijagrama zračenja kratkih antenskih nizova upotrebom haotičnog beamforming algoritma**

ПЕМ 2 - Среда, 25.11.2015. године у 14:30 - сала 5/1
AEM 2 - Wednesday, 25.11.2015, 14:30 – Hall 5/1

Председавајући: BAHADIR S. YILDIRIM и МИЛКА ПОТРЕБИЋ

Chairpersons: BAHADIR S. YILDIRIM and MILKA POTREBIĆ

- 6.8. Dejan M. Miljanović, Milka M. Potrebić, Dejan V. Tošić: **Microwave Bandpass Filter with Quasi-Lumped Elements (*invited paper*)**
- 6.9. Naser Ojaroudiparchin: **Multi-Layer 5G Mobile Phone Antenna for Multi-User MIMO Communications**
- 6.10. Theodoros K. Katsibas, Vasileios Vlachos, Costas Chaikalis, Konstantinos P. Tsoukatos, Charalampos Liolios: **Advanced Numerical Solution Algorithms for Modern EM Wave Propagation Problems**
- 6.11. Massinissa Hadjloum, Mohammed El Gibari, Hongwu Li, Afshin S. Daryoush: **Electrode Structure for both Poling and Driving of the Electro-Optic Polymer in an Analog-to-Digital Converter based on an Optical Deflector**
- 6.12. Bahadır S. Yildirim: **Multiband Chip Antenna for WLAN Applications**
- 6.13. Selcuk Ozgur, Mehmet Abbak, Ibrahim Akduman: **A Comparison of Range Test Method-Linear Sampling Method for Microwave Imaging**

ПЕМ 3 - Среда, 25.11.2015. године у 17:00 - сала 5/1
AEM 3 - Wednesday, 25.11.2015, 17:00 – Hall 5/1

Председавајући: NASER OJAROUDIPARCHIN и НЕБОЈША ДОНЧОВ

Chairpersons: NASER OJAROUDIPARCHIN and NEBOJŠA DONČOV

- 6.14. Nataša J. Nešić, Nebojša S. Dončov: **Analysis of TLM Air-vent Model Applicability to EMC Problems**
- 6.15. Konstantinos I. Maniotis, George S. Kliros: **Design of an Ultra-Thin Bandwidth-Optimized Metamaterial Absorber for EMC Applications**
- 6.16. Naser Ojaroudiparchin: **Design of Vivaldi Antenna Array with End-Fire Beam Steering Function for 5G Mobile Terminals**
- 6.17. Mohammed El Gibari, Sara Bretin, Massinissa Hadjloulm, Patrick Derval, Hongwu Li: **Coplanar Waveguide to Microstrip Transition in Thin Polymer Film for Characterization and Packaging of Microwave Photonic Components**
- 6.18. Veljko Crnadak, Siniša Tasić: **VHF Quadrature Hybrid Coupler**
- 6.19. Nebojša U. Pjevalica, Nenad S. Petrović, Miloš M. Nikolić: **Detection of the External Magnetic field Polarity Through the Inductance Voltage Harmonic Phase Order**
- 6.20. Mehmet Abbak, Selcuk Ozgur, Ibrahim Akduman: **Shorted Stacked Antenna with Folded Feed for Microwave Detection of Brain Stroke**

СЕКЦИЈА 7: ПРИМЕЊЕНА ЕЛЕКТРОНИКА (ПЕЛ) APPLIED ELECTRONICS (AEL)

ПЕЛ 1 - Среда, 25.11.2015. године у 8:30 - сала 3/1
AEL 1 - Wednesday, 25.11.2015, 8:30 – Hall 3/1

Elektronski sistemi/ Electronic systems

Председавајући: БРАНКО ДОКИЋ и ВАСИЛИЈ КОЖЕВНИКОВ

Chairperson: BRANKO DOKIĆ and VASILY KOZHEVNIKOV

- 7.1. Nenad J. Jevtić, Vujo R. Drndarević: **Smart Sensors for Environmental Radiation Monitoring Networks (*invited paper*)**
- 7.2. Vasily Yu. Kozhevnikov, Andrey V. Kozyref, Alexander V. Batrakov, Natalia S. Semeniuk, Vadim M. Karaban: **Diagnostics of primary arcing in electronics of satellite telecommunication systems**
- 7.3. Nemanja V. Janković, Svetislav V. Ćirić, Nenad S. Jovičić: **System for indoor localization of mobile robots by using machine vision**
- 7.4. Trifun Savić, Milutin Radonjić: **One Approach to Weather Station Design Based on Raspberry Pi Platform**
- 7.5. Roland Szabo: **Controlling a Robotic Arm on Serial Interface with an FPGA Running Linux Operating System**
- 7.6. Nedjeljko Lekić, Slobodan Djukanović, Mililja Bajčeta, Trifun Savić: **A Bioinformatic System for Collecting and Processing Environmental Data**
- 7.7. Nataša S. Živić, Obaid Ur-Rehman, Christoph Ruland: **Evolution of Smart Metering Systems**

ПЕЛ 2 - Среда, 25.11.2015. године у 11:00 - сала 3/1
AEL 2 - Wednesday, 25.11.2015, 11:00 – Hall 3/1

Elektronski uređaji i komponente/ Electronic devices and components

Председавајући: ЛАЗАР САРАНОВАЦ и СЛОБОДАН ЂУКАНОВИЋ

Chairpersons: LAZAR SARANOVAC and SLOBODAN DJUKANOVIĆ

- 7.8. Pavel Broulim, Jan Bartovsky, Jan Broulim, Petr Burian, Vjačeslav Georgiev, Michael Holik, Vaclav Kraus, Aleš Krutina, Jan Moldaschl, Vladimir Pavliček, Stanislav Pospíšil, Jakub Vlašek: **Compact device for detecting single event effects in semiconductor components**
- 7.9. Radek Salom, Jan Broulim: **LDPC (512,480) Genetic Design as Alternative to CRC in Implementation of AODV Routing Protocol Stack**
- 7.10. Jiri Žahour, Jindrich Krivka, Kamil Kosturik, Sten Fredholm: **Self-sufficient System for NOx Reduction**
- 7.11. Denys I. Zaikin: **Round and Tubular Wire Skin Effect Modeling and Usage SPICE as Maxwell's Equations Solver**
- 7.12. Jindrich Krivka, Jiri Zahour, Kamil Kosturik, Sten Fredholm: **Automatic Detection of Different Mechanical ERDPF Configurations**
- 7.13. Ludek Elis, Kamil Kosturik: **The Extrapolation of Failure Rate of Electrical Components in Specific Operational Conditions**
- 7.14. Lukas Pusman, Pavel Turjanica, Kamil Kosturik: **Verification of Train Localization by Using Inertial Measurement System and Identification of Characteristic Segments**

ПЕЛ 3 - Среда, 25.11.2015. године у 14:30 - сала 3/1
AEL 3 - Wednesday, 25.11.2015, 14:30 – Hall 3/1

Projektovanje elektronskih kola / Electronic circuits design

Председавајући: ИВАН МЕЗЕИ и ИВАН ПОПОВИЋ

Chairpersons: IVAN MEZEI and IVAN POPOVIĆ

- 7.15. Petr Burian: **Managing Large-Scale FPGA Design for Generic Embedded Control System**
- 7.16. Gennady Galustov, Viacheslav Voronin: **Parameters estimation of random sequence in the stochastic calculating devices**
- 7.17. Strahinja P. Janković, Vujo R. Drndarević: **Microcontroller Power Consumption Measurement Based on PSoc**
- 7.18. Ondrej Lufinka: **Design of the New Advanced Modes for the Mobile Platform Control Application**
- 7.19. Pavle Stepanić, Aleksa Krošnja, Goran Pavlović, Aleksandar Stepanović: **Implementation of wireless control on electrical bridge cranes and gantry crane**
- 7.20. Djordje Pešić, Ivan Ratković: **An Efficient FPGA Implementation of Floating Point Addition**
- 7.21. Nina Fat, Ištvan Pap, Aleksandar Živković: **Kapacitivni sensor dodira sa niskom potrošnjom**

СЕКЦИЈА 8: МУЛТИМЕДИЈА (MM) MULTIMEDIA (MM)

MM 1 - Уторак, 24.11.2015. године у 14:30 - сала 3/0
MM 1 - Tuesday, 24.11.2015, 14:30 – Hall 3/0

Obrada audio signala i video kodovanje /Audio signal processing and video coding

Председавајући: ДРАГАНА ШУМАРАЦ-ПАВЛОВИЋ и ЗОРАН БОЈКОВИЋ

Chairpersons: DRAGANA ŠUMARAC-PAVLOVIĆ and ZORAN BOJKOVIĆ

- 8.1. Sandra Sovilj-Nikić, Ivan Sovilj-Nikić: **The Development of Phone Duration Model in Speech Synthesis in the Serbian Language** (*invited paper*)
- 8.2. Miodrag Stanojević, Miloš Bjelić, Jelena Čertić, Dragana Šumarac Pavlović: **Psihoakustička analiza uticaja parametara decimacionih filtera na kvalitet audio signala**
- 8.3. Danica Č. Boljević, Aleksandar H. Milenković, Damir M. Savković: **Prikaz rezultata međulaboratorijskog poređenja nacionalnih akreditovanih laboratorija iz oblasti merenja nivoa buke na otvorenom prostoru**
- 8.4. Jelena Tomić, Nebojša Bogojević: **Comparative analysis of European models for railway noise prediction**
- 8.5. Zoran M. Milićević, Zoran S. Bojković: **Performance of High Efficiency Video Coding (HEVC) HM-16.6 Encoder**
- 8.6. P. M. Papazoglou, D. A. Karras, R. C. Papademetriou: **Dynamic Channel Assignment algorithms for supporting QoS based services in wireless cellular environments**
- 8.7. Mihai Gavrilescu: **Recognizing emotions from videos by studying facial expressions, body postures and hand gestures**

MM 2 - Уторак, 24.11.2015. године у 17:00 - сала 3/0
MM 2 - Tuesday, 24.11.2015, 17:00 – Hall 3/0

Obrada i prenos video signala / Video signal processing and transmitting

Председавајући АНА ГАВРОВСКА и ДРАГАН КУКОЉ

Chairpersons: ANA GAVROVSKA and DRAGAN KUKOLJ

- 8.8. Goran J. Zajić: **Shot-Change Detection Based on Multifractal Analysis** (*invited paper*)
- 8.9. Goran J. Zajić, Milena D. Vesić, Ana M. Gavrovska, Irini S. Reljin: **Animation Frame Analysis**
- 8.10. Ali Akbari, Habibollah Danyali, Maria Trocan, Bertrand Granado: **A Novel Robust Image Transmission Scheme over Lossy Channels using Data Hiding**
- 8.11. Dragana Sandić-Stanković, Dragan Kukolj, Patrick le Callet: **Mera za ocenu kvaliteta slike zasnovana na piramidalnoj dekompoziciji i srednjoj kvadratnoj greški**
- 8.12. Javier Silvestre-Blanes: **Scalability in industrial image processing applications**
- 8.13. Diana Mandache, Ali Akbari, Maria Trocan: **Image Compressed Sensing Recovery Using Intra-Block Prediction**
- 8.14. Ivan Trebaljevac, Živko Bojović: **Business model for the Internet and mobile based marketing for the smart parking operators**

MM 3 - Среда, 25.11.2015. године у 8:30 - сала 3/0
MM 3 - Wednesday, 25.11.2015, 8:30 – Hall 3/0

Realizacije i ugrađen softver / Realization and embedded software

Председавајући: НИКОЛА ТЕСЛИЋ и МИЛАН БЈЕЛИЦА

Chairpersons: NIKOLA TESLIĆ and MILAN BJELICA

- 8.15. Ilija Bašičević, Milan Ačanski, Nikola Teslić, Miroslav Popović, Miloš Nikolić: **The Concept of Remote Tuner in Digital Television Software**
- 8.16. Rade Vulin, Tatjana Samardžić, Đorđe Simić, Branimir Kovačević: **Jedno rešenje realizacije programske podrške za obradu WebVTT prevoda prilikom reprodukcije HLS tokova podataka upotrebom FFmpeg biblioteka**
- 8.17. Darko Lulić, Mario Radonjić, Milena Milošević, Krsto Lazić: **Jedno rešenje integracije MPEG-DASH programske podrške na Android platformi**
- 8.18. Ljubomir J. Papuga, Đorđe M. Pešut, Teodora Đ. Novković, Stanislav Očovaj: **Optimizacija algoritama iz biblioteke WebRTC za MIPS arhitekturu**
- 8.19. Nemanja Fimić, Sreten Tanacković, Ilija Bašičević, Nikola Teslić: **PVR Trick-mode Emulation through Consecutive Jumps**
- 8.20. Nemanja Popović, Vladimir Živkov, Ilija Đukić, Ilija Bašičević: **Jedno rešenje programske podrške za kombinovanje DVB toka podataka i podataka sa mrežnog poslužioca na hibridnim STB uređajima**
- 8.21. Nedeljko Babić, Nikola Teslić, Teodora Novković, Branimir Vasić: **Optimizacija MP3 dekodera iz multimedijalne biblioteke FFmpeg za arhitekturu MIPS32R2**
- 8.22. Milena Milošević, Branko Rodaljević, Miloš Pejoić, Mario Radonjić: **One Implementation of Companion Screen Functionality for Hybrid Broadcast Broadband Television**
- 8.23. Nenad Jovanović, Goran Stupar, Nikola Teslić, Milan Bjelica: **One Solution for Rendering Translucent 2D UI Elements in 3D Space**

MM 4 - Среда, 25.11.2015. године у 11:00 - сала 3/0
MM 4 - Wednesday, 25.11.2015, 11:00 – Hall 3/0

Obrada slike / Image processing

Председавајући: ГОРАН ЗАЈИЋ и АЛЕКСЕЈ АВРАМОВИЋ

Chairpersons: GORAN ZAJIĆ and ALEKSEJ AVRAMOVIĆ

- 8.24. Milorad P. Paskas, Branimir D. Reljin, Irini S. Reljin: **Multifractal Techniques for Texture Classification and Image Filtering (*invited paper*)**
- 8.25. Aleksej Avramović, Igor Ševo, Irini Reljin: **Comparative analysis of texture classification based on low and high order local feature**
- 8.26. Marijeta Slavković-Ilić, Ana Gavrovska, Milan Milivojević, Irini Reljin, Branimir Reljin: **Algoritam za automatsku segmentaciju dojke i grudnog mišića iz mamograma**
- 8.27. Antonis Mairgiotis, Dimitrios Ventzas: **Video watermark detection in DCT domain for H.264/AVC through a hierarchical prior**
- 8.28. Andreja Samčović, Marija Milovanović: **Robust Digital Image Watermarking Based on Wavelet Transform and Spread Spectrum Techniques**
- 8.29. Viktor Tuba, Marko Beko: **DCT Based Algorithm for Blurred Regions Determination in Digital Images**
- 8.30. Miloš Jordanski, Aleksandra Arsić, Milan Tuba: **Dynamic Recursive Subimage histogram Equalization Algorithm for Image Contrast Enhancement**

СЕКЦИЈА 9: СОФТВЕРСКИ АЛАТИ И АПЛИКАЦИЈЕ (САА) SOFTWARE TOOLS AND APPLICATIONS (STA)

САА 1 – Уторак 24.11.2015. године у 14:30 - сала 1b/0
STA 1 – Thursday, 24.11.2015, 14:30 – Hall 1b/0

Softverski sistemi 1/ Software Systems 1

Председавајући: МЛАДЕН ВЕИНОВИЋ и ДРАЖЕН ДРАШКОВИЋ

Chairpersons: MLADEN VEINOVIĆ and DRAŽEN DRAŠKOVIĆ

- 9.1. Valentina Janev, Vuk Mijović, Sanja Vraneš: **Linked Data Approach to the PSI Directive Implementation: Supporting Tools and Lessons Learned**
- 9.2. Bojan Najdenov, Goran Petkovski, Milos Jovanovic, Riste Stojanov, Dimitar Trajanov: **Automated Linked Data Generation from the Transport Administration Domain**
- 9.3. Dragiša Stjepanović, Mihajlo Savić, Jelena Jokić, Slavko Marić: **Performance Measurements of Some Aspects of Multi-threaded Access to Key-value stores**
- 9.4. Duško Lukač: **The fourth ICT-based Industrial Revolution “Industry 4.0” – HMI and the case of CAE /CAD innovation with EPLAN P8**
- 9.5. Miroslav Lutovac, Vladimir Mladenović, Dragutin Debeljković: **Analiza sistema sa čistim vremenskim kašnjenjem korišćenjem računarskih algebarskih sistema**
- 9.6. Đorđe Kovačević, Stefan Pejić, Petar Jovanović, Nikola Teslić: **Prilagodavanje programskog prevodioca LuaJIT arhitekturi MIPS32 bez jedinice za operacije u aritmetici pokretnog zarez**
- 9.7. Violeta Vukobrat, Branislav Rankov, Petar Jovanović, Miroslav Popović: **Realizacija alata za generisanje sprege jezika Lua i C mehanizmom prevodioca LuaJIT**

САА 2 - Уторак, 24.11.2015. године у 17:00 - сала 1b/0
STA 2 - Tuesday, 24.11.2015, 17:00 – Hall 1b/0

Softverska podrška posebne namene / Special purpose software support

Председавајући: БОЖИДАР РАДЕНКОВИЋ и МИЛОШ ЦВЕТАНОВИЋ

Chairpersons: BOŽIDAR RADENKOVIĆ and MILOŠ CVETANOVIĆ

- 9.8. Milica M. Janković, Mila Todorović-Tirnanić, Ana Koljević Marković, Slobodanka Beatović, Strahinja Odalović, Boris Pijetlović, Stevan Sekulić, Nikola Jorgovanović, Vojislav Antić, Dejan Popović: **GammaKey Software for Acquiring, Storing, Retrieving and Processing Images Obtained by Gamma Camera – benefits for clinical practice (invited paper)**
- 9.9. Branislav Popović, Edvin Pakoci, Nikša Jakovljević, Goran Kočiš, Darko Pekar: **Voice Assistant Application for the Serbian Language**
- 9.10. Danilo Kovačević, Momčilo Krunić, Nenad Četić, Jelena Kovačević: **Xtext-based Eclipse editor for linker configuration file**
- 9.11. Milana Barać, Sandra Kukolj, Milana Antin, Dragan Kukolj: **Softverska podrška procesa upravljanja intelektualnom svojinom**
- 9.12. Aleksandar Milenković, Dragan Janković, Marija Stojković, Aleksandar Veljanovski, Petar Rajković: **Softverski modul za evidentiranje pruženih zdravstvenih usluga i utrošenih medikamenata u stacionaru**

- 9.13. Milan Jelisavčić, Nikola Veljković, Lazar Tršić, Dušan Majstorović: **Prilagodavanje operativnog sistema Fajerfoks OS za arhitekturu MIPS32**
- 9.14. Nemanja Obradović, Stevica Đukić, Goran Miljković, Bogdan Korać: **Jedno rešenje udaljene korisničke sprege za nadzor i kontrolu elektronskih uređaja**

CAA 3 - Среда, 25.11.2015. године у 8:30 - сала 1b/0
STA 3 - Wednesday, 25.11.2015, 8:30 – Hall 1b/0

Inteligentni sistemi / Artificial Intelligence

Председавајући: ЈЕЛЕНА КОВАЧЕВИЋ и ЗАХАРИЈЕ РАДИВОЈЕВИЋ

Chairpersons: JELENA KOVAČEVIĆ and ZAHARIJE RADIVOJEVIĆ

- 9.15. Ejub Kajan, Aldina Avdić, Ulfeta Marovac, Adela Ljajić, Goran Simić, Jelena Stanković: **Enhancing Local Economic Development Using Collective Intelligence**
- 9.16. Jovan Popović, Sofija Purić, Marko Batić, Dragan Bojić: **Enhancing Use Case Point estimation method using Fuzzy algorithms**
- 9.17. Elma Hot, Vesna Popović-Bugarin: **Soil data clustering by using K-means and fuzzy K-means algorithm**
- 9.18. Miljan Vučetić, Miroslav Hudec: **A Relational Database Role in Handling Fuzziness of Real World**
- 9.19. Cristian L. Leca, Leontin Tuță, Ioan Nicolaescu, Cristian I. Rîncu: **Recent advances in location prediction methods for cellular communication networks**
- 9.20. Dimitrios Tselios, Ilias K. Savvas: **Analysis of the results obtained by Intelligent Method for Project Portfolio Scheduling**
- 9.21. Alexandru-Cosmin Grivei, Mihai Datcu: **HyperMINE – An Earth Observation Spatio-Temporal Data Mining System**
- 9.22. Miloš Ilić, Petar Spalević, Mladen Veinović, Abdolkarim Abdala M. Ennaas: **Data mining model for early fruit diseases detection**

CAA 4 - Среда, 25.11.2015. године у 11:00 - сала 1b/0
STA 4 - Wednesday, 25.11.2015, 11:00 – Hall 1b/0

Aplikacije Android sistema / Android System Applications

Председавајући: СИНИША РАНЂИЋ и МАРИЈА ПУНТ

Chairpersons: SINIŠA RANDJIĆ and MARIJA PUNT

- 9.23. Ioannis C. Stylios, Sotirios Chatzis, Olga Thanou, Spyros Kokolakis: **Mobile Phones & Behavioral Modalities: Surveying users' practices**
- 9.24. Željko Jovanović, Ranko Bačević, Radoljub Marković, Siniša Randjić: **Android Application for Observing Data Streams from Built-in Sensors Using RxJava**
- 9.25. Dijana Jagodić, Dejan Vujičić, Siniša Randić: **Android system for identification of objects based on QR code**
- 9.26. Aleksandar D. Keleč, Dijana R. Vuković: **Privacy threats on Android devices – Big Brother is Watching you**
- 9.27. Filip Vranešević, Tomislav Sajdl, Nebojša Perić, Nikola Vranić: **Pregled metoda za poboljšanje bezbednosti Androida za potrebe sistema uslovnog pristupa u digitalnoj televiziji**

- 9.28. Aleksandar Ćurguz, Tomislav Maruna, Branimir Kovačević, Milan Z. Bjelica: **Android aplikacija kao servis roditeljske kontrole u automobilu**
- 9.29. Aleksandar Marković, Aleksandar Rikalo, Miodrag Dinić, Miroslav Tišma, Petar Jovanović: **Stablo uređaja u jezgru Linuksa i podrška za emulator QEMU i OS Android**
- 9.30. Nikola Puača, Marko Kovačević, Branimir Kovačević, Tomislav Maruna: **Jedna realizacija Android servisa za komunikaciju sa jedinicom za kontrolu automobila**

CAA 5 - Среда, 25.11.2015. године у 14:30 - сала 1b/0
STA 5 - Wednesday, 25.11.2015, 14:30 – Hall 1b/0

Vizualizacija / Visualisation

Председавајући: БОРИСЛАВ ЂОРЂЕВИЋ и ЖАРКО СТАНИСАВЉЕВИЋ

Chairperson: BORISLAV ĐORĐEVIĆ and ŽARKO STANISAVLJEVIĆ

- 9.31. Žarko S. Stanisavljević: **Data Encryption Standard Visual Representation (*invited paper*)**
- 9.32. Maja M. Lutovac, Zoran Dimić, Stefan Mitrović, Aleksandar Stepanović: **Reconfigurable Multi-robot Virtual Environment**
- 9.33. Violeta Ćikoš, Marko Kovačević, Branimir Kovačević, Gordana Velikić: **3D korisničko okruženje za prikaz podataka na kontrolnoj tabli vozila**
- 9.34. Dušan Tatić, Bojan Tešić: **Unapređenje sistema zaštite na radu primenom tehnologije proširene stvarnosti**
- 9.35. Ivan Rajković, Velibor Ilić, Bojan Z. Majstorović, Ivica Hariba: **Prikaz signala elektronskih upravljačkih jedinica u realnom vremenu na mobilnim platformama**

CAA 6 - Среда, 25.11.2015. године у 17:00 - сала 1b/0
STA 6 - Wednesday, 25.11.2015, 17:00 – Hall 1b/0

Heterogeno i „Cloud” računarstvo / Cloud and Heterogeneous Computing

Председавајући: БОШКО НИКОЛИЋ и МАРКО МИШИЋ

Chairperson: BOŠKO NIKOLIĆ and MARKO MIŠIĆ

- 9.36. Miodrag Živković: **eWISENS – simulation of the wireless sensor networks and graph algorithms (*invited paper*)**
- 9.37. Nikola Zogović, Miloš Jevtić, Valentina Timčenko, Borislav Đorđević: **A Multi-objective Assessment Framework for Cloud Computing**
- 9.38. Elena Markoska, Magdalena Kostoska, Sasko Ristov, Marjan Gusev: **Using P-TOSCA to prevent Vendor Lock-in for Cloud-based Laboratories**
- 9.39. Elena Markoska, Nevena Ackovska, Sasko Ristov, Marjan Gusev, Magdalena Kostoska: **Software Design Patterns to Develop an Interoperable Cloud Environment**
- 9.40. Dušan V. Nikolov, Marko J. Mišić, Milo V. Tomašević: **GPU-based Implementation of Reverb Effect**
- 9.41. Alvin Huseinović, Samir Ribić: **Benchmark comparison of computing the Mandelbrot set in OpenCL**
- 9.42. Ace Dimitrevski, Vladimir Trajkovik, Sonja Filiposka: **Web caching and content switching for performance of content delivery**

CAA 7 - Среда, 25.11.2015. године у 17:00 – сала 1а/0
STA 7 - Wednesday, 25.11.2015, 17:00 – Hall 1a/0

Testiranje sistema / System testing

Председавајући: НЕНАД ГРБАНОВИЋ и САША СТОЈАНОВИЋ

Chairperson: NENAD GRBANOVIĆ and SAŠA STOJANOVIĆ

- 9.43. Miroslava Dražić Vignjević, Marko Vučićević, Miodrag Djukić, Boris Radin: **Efficient Adaptation and High Reusability of Test Suites in a Black Box Testing Environment**
- 9.44. Ivan Považan, Marko Krnjetin, Nenad Četić: **Communication Interface Libraries as an Extension to the Debugging Framework for DSP applications**
- 9.45. Vanja Komadina, Jan Zloh, Dako Banika, Dejan Stefanović: **Automation of Norig verification for digital TV receivers**
- 9.46. Veljko Tešić, Mirko Pap, Velibor Ilić, Miroslav Nedeljković: **Automatizacija testiranja elektronskih upravljačkih jedinica u HIL namenskom okruženju**
- 9.47. Jovica Kričković, Đorđe Miljković, Miodrag Đukić: **Automatizacija ispitivanja bootloader-a na ciljanoj DSP platformi**
- 9.48. Petar Brčić: **Testiranje performansi EMC XtremIO All-Flash sistema za skladištenje podataka**

СЕКЦИЈА 10: СТУДЕНТСКА СЕКЦИЈА (C)
STUDENT PAPERS (S)

C1 - Уторак, 24.11.2015. године у 17:00 - сала 6/1
S1 - Tuesday, 24.11.2015, 17:00 – Hall 6/1

Председавајућа: МИЛКА ПОТРЕБИЋ и ЈЕЛЕНА ЋЕРТИЋ

Chairperson: MILKA POTREBIĆ and JELENA ČERTIĆ

- 10.1. Marko Bošković: **Voltage, peak current and dual current mode control methods of noninverting buck-boost converter**
- 10.2. Branka Milošević, Andrija Stanković: **Naponski kontrolisani oscilator u TSMS 90 nm tehnologiji**
- 10.3. Goran Bratić: **A realisation of a sniffer tool for eavesdropping SCADA communication using IEC-60870-5-104 protocol**
- 10.4. Tamara Šekularac, Isidora Bojović, Vladimir Vesić: **Java aplikacija za određivanje rekurencija brojeva elemenata Herbrandovih domena**
- 10.5. Milica Z. Đelić: **Prepoznavanje govora pomoću keprstralne analize**
- 10.6. Danica M. Despotović: **Energy Metering for 3-phase Induction Motor using Two Types of Design Approaches**

РАДОВИ ПО ПОЗИВУ INVITED PAPERS

- 2.1. Nataša Maksić, Aleksandra Smiljanić: **Routing Optimization in Data Center Networks** *(invited paper)*
- 2.2. Marija Antić, Aleksandra Smiljanić: **Optimization of Non-Blocking Packet Networks using Load Balanced Shortest Path Routing** *(invited paper)*
- 2.16. Kurt Richter: **A Brief Historic Review on Transatlantic Telecommunication – from transatlantic cables to satellite communication** *(invited presentation)*
- 3.1. Savo Glišić: **Advanced Wireless Networks – 5G/6G Joint Design of Technology and Business Models** *(invited paper)*
- 3.6. Marija Z. Malnar, Nataša J. Nešković, Aleksandar M. Nešković: **Optimization of Routing Protocols and Metrics for Multi-Channel Multi-Interface Wireless Mesh Networks** *(invited paper)*
- 3.12. Igor A. Tomić, Milutin S. Davidović, Sanja M. Bjeković: **On the downlink capacity of LTE cell** *(invited paper)*
- 4.1. Hannes Toepfer, Elena Chervakova, Marco Goetze, Tino Hutschenreuther, Bojana Nikolić, Bojan Dimitrijević: **Application of Wireless Sensors Within a Traffic Monitoring System** *(invited paper)*
- 4.2. Zoran Golubičić: **Digital beam former for multibeam multistatic radar receiver** *(invited paper)*
- 4.7. Vesna M. Blagojević, Predrag N. Ivaniš: **Ergodic capacity of multi-antenna spectrum sharing cognitive radio with outdated CSI** *(invited paper)*
- 4.13. Milica Petković: **Performance analysis of mixed RF/FSO systems** *(invited paper)*
- 5.1. Predrag R. Tadić, Željko M. Đurović, Aleksandra Lj. Marjanović, Sanja M. Vujnović: **Fault diagnosis in nonlinear stochastic systems via particle filtering** *(invited paper)*
- 5.9. Milan R. Dinčić, Zoran H. Perić, Dragan B. Denić: **Designing Quantizes for Coding Signals with Fixed and Variable Codeword Length** *(invited paper)*
- 5.16. Ivan D. Jokić, Stevan D. Jokić, Vlado D. Delić, Zoran H. Perić: **Mel-Frequency Cepstral Coefficients as Features for Automatic Speaker Recognition** *(invited paper)*
- 5.24. Andrej M. Savić, Mirjana B. Popović: **Brain Computer Interface Prototypes for Upper Limb Rehabilitation: a Review of Principles and Experimental Results** *(invited paper)*
- 6.1. Snežana Lj. Stefanovski Pajović, Milka M. Potrebić, Dejan V. Tošić: **Microwave Bandpass and Bandstop Waveguide Filters Using Printed-Circuit Discontinuities** *(invited paper)*
- 6.8. Dejan M. Miljanović, Milka M. Potrebić, Dejan V. Tošić: **Microwave Bandpass Filter with Quasi-Lumped Elements** *(invited paper)*
- 7.1. Nenad J. Jevtić, Vujo R. Drndarević: **Smart Sensors for Environmental Radiation Monitoring Networks** *(invited paper)*
- 8.1. Sandra Sovilj-Nikić, Ivan Sovilj-Nikić: **The Development of Phone Duration Model in Speech Synthesis in the Serbian Language** *(invited paper)*
- 8.8. Goran J. Zajić: **Shot-Change Detection Based on Multifractal Analysis** *(invited paper)*
- 8.24. Milorad P. Paskas, Banimir D. Reljin, Irini S. Reljin: **Multifractal Techniques for Texture Classification and Image Filtering** *(invited paper)*
- 9.8. Milica M. Janković, Mila Todorović-Tirmanić, Ana Koljević Marković, Slobodanka Beatović, Strahinja Odalović, Boris Pijetlović, Stevan Sekulić, Nikola Jorgovanović, Vojislav Antić, Dejan Popović: **GammaKey Software for Acquiring, Storing, Retrieving and Processing Images Obtained by Gamma Camera – benefits for clinical practice** *(invited paper)*
- 9.31. Žarko S. Stanisavljević: **Data Encryption Standard Visual Representation** *(invited paper)*
- 9.36. Miodrag Živković: **eWISENS – simulation of the wireless sensor networks and graph algorithms** *(invited paper)*

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