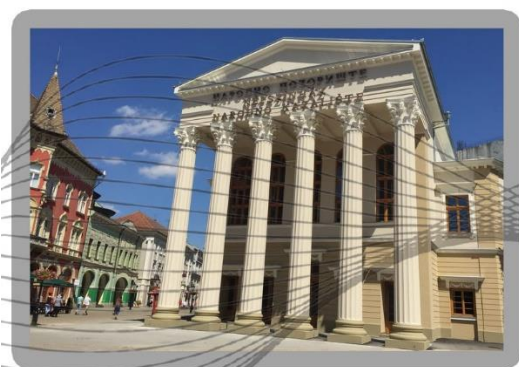


# SIP 2016

Science in Practice

34th International Scientific Conference



## Science in Practice

Subotica

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"Science in Practice 2016" - Subotica

# SIP 2016



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## **PUBLISHER**

Subotica Tech – College of Applied Sciences

## **EDITORS-IN-CHIEF**

Igor Fürstner

## **PROGRAM COMMITTEE**

Igor Fürstner  
Zlatko Čović  
Janoš Šimon  
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Sanja Maravić Čisar  
Livia Sedmina  
Kvasznicza Zoltán  
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Lukas Mennike  
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## **ORGANIZING COMMITTEE**

Igor Fürstner  
Zlatko Čović  
Janoš Šimon  
Laslo Gogolak  
Sanja Maravić Čisar  
Livia Sedmina  
Atila Nađ

## **Proofreader**

Livia Sedmina

## **Design and layout**

Janoš Šimon

**All papers published in this proceeding have  
been reviewed**

## **CONTACT**

### **SIP 2016 - Subotica**

Subotica Tech – College of Applied Sciences

Marka Oreškovića 16

24000 Subotica, Serbia

<http://www.vts.su.ac.rs/en/page/sip-2016/>

Phone: +381-(0)24-655-201

Fax: +381-(0)24-655-255

e-mail:simon@vts.su.ac.rs

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## CONFERENCE PROGRAMME

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### THURSDAY - 8 December 2016

17:00 - Arrival of first guests / Hotel PBG, Harambašićeva 19-21, Subotica

19:30 - 22:00 – Social event at the Kafa Priča, Korzo 9/2, 24000 Subotica – (for guests and members of organizing committee)

### FRIDAY - 9 December 2016

08:30 - 09:00 - Registration for the Conference at Subotica Tech

09:00 - 09:20 - Opening Ceremony of the Conference (Room 206)

09:20 - 10:30 - **Plenary sessions** (Room 206) - Chairman (*Igor FÜRSTNER, Michael HARTJE*)

- Thomas RISSE - It's Time for Unums – an Alternative to IEEE 754 Floats and Doubles
- Sören PEIK - QUSAR: Quite Universal Software Adjustable Radio
- Bernhard ARNDT - Decentralized Electrical Energy Supply and Electrobility
- Michael HARTJE - Change in High voltage engineering -- from the past to the future
- M. LABAK, Željko HOCENSKI, Tomislav MATIĆ - Speech Recognition in Real-Time

10:30 - 11:00 - Coffee break

11:15 – 12:45 **Section 2** (Room 206) - Chairman (*Tomislav KESER, Zlatko ČOVIĆ*)

- Miklos POTH - Discrete Tomographic Reconstruction of Binary Matrices Using Particle Swarm Optimization
- Michael HARTJE - Software defined Radio with Redpitaya – a measurement device and multipurpose radio system hardware
- Lukas MENNICKE, Heinz ENDRES - Communication between digital circuits in SoCs – a new master lecture
- Andreas KRÄMER: - Energy Efficient Field Weakening Techniques for low-power and low-cost PMSM Drives with Sensorless Vector Control
- Anđelko LIŠNJIĆ, Vanja MANDRIĆ-RADIVOJEVIĆ, Slavko RUPČIĆ - Interception in Telecommunications
- Matej ŽNIDAREC, Srete NIKOLOVSKI, Damir ŠLJIVAC, Danijel TOPIĆ - Coordination of Relay Protection System of a Biomass Power Plant Spin Valis
- Tomislav KESER, Gabrijela KRAMAR, Hrvoje RADMAN - Application of Directional Contour Tracing Method in Classification of 2D Shapes

13:00 – 14:30 Lunch

14:50 – 16:50 **Section 3** (Room 206) - Chairman (*Sören PEIK, János SIMON*)

- Ildikó PERJÉSI-HÁMORI - Fourier Series and their Engineering Applications Using Computer Algebra System
- Gergely NYITRAY - Axial irradiance distribution of 2-dimensional localized optical waves
- György ELMER, István GYURCSEK - Lessons from a Loop Impedance Test at the Inspection of Electrical Installation
- György ELMER, Ildikó HORVÁTH - A Simple Memristor Based Device for Electric Energy Measurement
- Robert PINTER, Sanja MARAVIĆ ČISAR - Efficiency of the project-oriented learning

- Igor FÜRSTNER, Laslo GOGOLAK - Application of "smart" motors in mechatronic devices
- János SIMON, Gyula MESTER, Zlatko ČOVIĆ, Dalibor DOBRILOVIĆ, Imre PETKOVICS - IIoT environment and multi criteria decision making systems
- Petar ČISAR, Sanja MARAVIĆ ČISAR - Statistical quality control in function of threshold determining in network anomaly detection
- Eva PATAKI, Andras SAGI - The Reorganization Process in an Enterprise
- Andor SAGI, Anita SABO, Bojan KULJIĆ, Tibor SZAKÁLL - Applying Neuro-fuzzy Systems in Hospital

16:50 - 17:00 Closing Ceremony

19:00 - Conference Dinner / Woman's Lido (Ženski štrand), Palić

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## PREFACE

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Dear Colleagues, this year, in 2016, our institution, Subotica Tech - College of Applied Sciences has the honor to organize the international scientific conference "SCIENCE IN PRACTICE" Our objective is to continue the tradition of previous conferences, i.e. to ensure a forum for the partner institutions for presenting their educational and research achievements, to maintain professional contacts and further the cooperation possibilities. The participants:

- University of Pécs, Hungary,
- Óbuda University, Budapest, Hungary,
- J. J. Strossmayer University, Osijek, Croatia,
- UoAS Hochschule Bremen, Germany,
- UoAS Hochschule für Angewandte Wissenschaften Würzburg- Schweinfurt, Germany,
- Subotica Tech - College of Applied Sciences, Subotica, Serbia

I hereby respectfully invite you and your colleagues to participate in this year's international scientific conference "Science in Practice".

Date:

8-9 December 2016

Location:

Subotica Tech - College of Applied Sciences

Marka Oreškovića 16

24000 Subotica, Serbia

I would like to ask you to inform your colleagues about this event so that we, as the host institution, can ensure the organization of this conference of the highest possible quality.

Yours sincerely

*Dr Fürstner Igor*

Dean

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## TABLE OF CONTENTS

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János SIMON, Gyula MESTER, Zlatko ČOVIĆ, Dalibor DOBRILOVIĆ, Imre PETKOVICS - <i>IIoT environment and multi criteria decision making systems</i>	9
Bernhard ARNDT - <i>Decentralized Electrical Energy Supply and Electrobility</i>	14
Matej ŽNIDAREC, Srete NIKOLOVSKI, Damir ŠLJIVAC, Danijel TOPIĆ - <i>Coordination of Relay Protection System of a Biomass Power Plant Spin Valis</i>	17
György ELMER, István GYURCSEK - <i>Lessons from a Loop Impedance Test at the Inspection of Electrical Installation</i>	28
Petar ČISAR, Sanja MARAVIĆ ČISAR - <i>Statistical quality control in function of threshold determining in network anomaly detection</i>	32
Andor SAGI, Anita SABO, Bojan KULJIĆ, Tibor SZAKÁLL - <i>Applying Neuro-fuzzy Systems in Hospital</i>	37
Eva PATAKI, Andras SAGI - <i>The Reorganization Process in an Enterprise</i>	41
Lukas MENNICKE, Heinz ENDRES - <i>Communication between digital circuits in SoCs – a new master lecture</i>	46
Thomas RISSE - <i>It's Time for Unums – an Alternative to IEEE 754 Floats and Doubles</i>	50
Ildikó PERJÉSI-HÁMORI - <i>Fourier Series and their Engineering Applications Using Computer Algebra System</i>	52
	54

