



Central European Conference on Information and Intelligent Systems

September 19-21, 2018 Faculty of Organization and Informatics, Varaždin, Croatia

CECIIS 2018 Final Program

DAY 1: Wedr	nesday, September 19 th	Location	
09:00-10:00	Registration	2 nd Floor, Room 3	
10:00-10:30	OPENING AND WELCOME SESSION	2 nd Floor, Room 1	
	Chair: Vjeran Strahonja		
10:30-11:15	KEYNOTE SPEAKER: Dimitris Karagiannis (University of Vienna,	2 nd Floor, Room 1	
	Faculty of Computer Science, Vienna, Austria)		
	The impact of digitization on industry: a research perspective		
	Chair: Vjeran Strahonja		
11:15-11:45	Coffee Break Bas	sement, Coffee bar InfoClub	
11:45-12:30	KEYNOTE SPEAKER: Dieter Hertweck (Reutlingen University, Fac	culty 2 nd Floor, Room 1	
	of Computer Science, Herman Hollerith Research Centre, Reutlingen,		
	Germany)		
	The Digital Transformation in the manufacturing sector - Challenges		
	and Chances for SME		
	Chair: Vjeran Strahonja		
12:30-14:00	Lunch Break	Self-arrangement	
12:30-14:00	PROGRAM COMMITTEE MEETING	3 rd Floor, Faculty Hall	

Conference Sessions

Conference S	onterence Sessions		
14:00-15:15	Location: 2 nd Floor, Room 3		
	DATA AND KNOWLEDGE BASES		
Chair: Alen Lovrenčić/Mirko Maleković/Kornelije Rabuzin			
	Leo Mršić, <i>Sandro Skansi</i> and Robert Kopal		
	Preliminary Study for a Survey-Based Fuzzy Membership Function Definition for		
	Imprecise Quantification in Croatian		
	Katarina Rojko and Dejan Jelovac		
	Challenges Due to Excessive Amount of Online Data and (Mis)Information		
	SOFTWARE ENGINEERING		
	Chair: Vjeran Strahonja/Zlatko Stapić		
	Tomislav Turek, Markus Schatten and Tonimir Kišasondi		
	Domain Specific Honeytokens Based on Natural Language Processing -		
	A Conceptual Model		
	QUALITY OF SOFTWARE AND SERVICES		
	Chair: Melita Kozina/Valentina Kirinić		
	Nadica Hrgarek Lechner		
	Developing a Compliant Cybersecurity Process for Medica	l Devices	
15:15-15:45	Coffee Break	Basement, Coffee bar InfoClub	

Conference Sessions

Conference Sessions				
15:45-17:15	Location: 2 nd Floor, Room 3	Location: 2 nd Floor, Room 8		
	EMERGING TRENDS IN ICT	COMPUTER GAMES		
	Chair: Neven Vrček/Sandra Lovrenčić	Chair: Mario Konecki/Markus Schatten		
	Martina Tomičić Furjan, Vjeran Strahonja	Martin Kinitzki, Dieter Hertweck, Peter		
	and Katarina Tomičić-Pupek	Kühfuß and Valeria Kinitzki		
	Framing the Digital Transformation of	How SMEs Can Use Games to Assess the		
	Educational Institutions	Innovation Potential of New Technologies		
	Bojan Krajnc, Polona Tominc, Ruben Picek	Markus Schatten, Bogdan Okreša Đurić and		
	and Simona Sternad Zabukovšek	Igor Tomičić		
	CRM Solutions and Effectiveness of Sales	Towards an Application Programming		
	Processes in Export Organizations	Interface for Automated Testing of Artificial		
	Dijana Peras	Intelligence Agents in Massively Multi-		
	Guidelines for GDPR Compliant Consent	Player On-Line Role-Playing Games		
	and Data Management Model in ICT	Igor Tomičić, Bogdan Okreša Đurić and		
	Businesses	Markus Schatten		
	Barbara Šlibar, Dijana Plantak Vukovac,	Implementing Agent Roles in Massivley		
	Sandra Lovrenčić, Martina Šestak and	Multi-Player On-Line Role-Playing Games		
	Darko Andročec	Robert Fabac and Danijel Radošević		
	Gamification in a Business Context:	Computer Implementation of "Rational Pigs		
	Theoretical Background	Game" Extended Model and Humans'		
	Alen Kišić	Decision-Making in Related Scenarios		
	The Use of Social Media in Political			
	Campaigns: The Case of Croatian Local			
	Elections 2017			
	Igor Pihir, Katarina Tomičić-Pupek and			
	Martina Tomičić Furjan			
	Digital Transformation Insights and Trends			
17:30-21:00	WELCOME PARTY WITH LIGHT DINNER	Hotel Park		
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Parallel Events

09:00-17:30	PROFESSIONAL	TRACKS (In Croatia	n):			
14:30-17:30	Digitalna transf	ormacija obrazovni	h institucija (Digit	al (Ground Floor,	, Room 10
	Transformation	of Educational Inst	itutions)			
09:00-17:30	Računalne igre	 stručna postignuć 	a (Computer Gam	nes -	Ground Floo	r, Room 7
	Professional De	evelopments)				
14:00-14:30	STUDENT POST	ER AND PRESENTAT	ION SECTION: Po	sters	2 nd Floo	r Hallway
	Chair: Violeta V	ïdaček-Hainš				
14:30-17:30	STUDENT POST	ER AND PRESENTAT	ION SECTION: Pre	esentations	3 rd Floor, Fo	aculty Hall
	Chair: Violeta V	idaček-Hainš				
10:30-17:30	DAN E-ŠKOLA (IN CROATIAN)		(Ground Floor	, Room 10
		ls: Establishing a Syst				
	co-finan	ced by the European	Union from the Eur	opean Structural	and Investme	ent Funds
09:00-13:00	PROJECTS PRES	ENTATION		Ground Floor	and 2 nd Floor	· Hallways
	Project Informa	tion Stands:				
	e-Schools	DIGITRANS	CRISS	HigherD	ecision	ISSES









Conference Sessions

2nd Floor, Room 3 08:30-09:00 Registration Location: 2nd Floor, Room 3 Location: 2nd Floor, Room 8 09:00-11:00 **EDUCATION AND LEARNING ANALITICS** ICT ENTERPRENEURSHIP AND INOVATION Chair: Ksenija Vuković/Marina Klačmer Chair: Blaženka Divjak/Igor Balaban Teodora Lolić, Sonja Ristić, Darko Stefanović Čalopa and Uglješa Marjanović Nikola Zornić, Aleksandar Marković and Sava Čavoški **Acceptance of E-Learning System at Faculty of Technical Sciences Forecasting Cryptocurrency Investment** Mirjana Pejić Bach, Dario Šebalj, Daniela **Return Using Time Series and Monte Carlo** Garbin Praničević and Igor Pihir Simulation **Employment of Business Informatics** STRATEGIC PLANNING AND DECISION **Graduates: Preliminary Results MAKING** Simona Sternad Zabukovšek, Ruben Picek, Chair: Nina Begičević Ređep/Tihomir Hunjak Polona Tominc and Samo Bobek Sandro Radovanović, Boris Delibašić and Analysis of Students' Experiences with Milija Suknović Multi-Task Learning for Ski Injury **Microsoft Dynamics NAV Solution Using Technological Acceptance Model Predictions** Mirela Mabić and Dražena Gašpar Valentina Đurek, Nikola Kadoić and Željko Facebook as a Learning Tool - Students' Dobrović **Digital Maturity of Higher Education Perspective** Lea Dujić Rodić and Andrina Granić Institution: A Meta Model of the Analytical **Tangible User Interfaces for Enhancement Network Process (ANP) and Decision** of Young Children's Mathematical Problem EXpert (DEX) **Solving and Reasoning: A Preliminary** Romano Kovač and Dijana Oreški **Review of Relevant Literature Educational Data Driven Decision Making:** Early Identification of Students at Risk by Danijel Filipović, Igor Balaban and Dijana Oreški Means of Machine Learning **Cluster Analysis of Student's Activities** Marijana Zekić-Sušac, Adela Has and Saša from Logs and Their Success in Mitrović **Self-Assessment Tests Recursive Partitioning in Predicting Energy Consumption of Public Buildings** 13:00-14:00 **Lunch Break** Self-arrangement **GUIDED TOUR OF VARAŽDIN** 15:00-24:00

Parallel Events

09:00-13:00 Ground Floor, Room 6 **Workshop on Data Analysis** 09:00-13:00 2nd Floor Hallways **PROJECTS PRESENTATION**

Project Information Stands:

CONFERENCE EXCURSION-SOCIAL EVENT

DIGITRANS Higher Decision ISSES

high PECISION Interregi **ISSES**

10:00-14:30 MEETING: 4. interkatedarski skup iz područja poslovne informatike - tema: Utjecaj digitalne transformacije (The 4th

Meeting of Business Informatics Departments – The Theme:

Infuence of Digital Transformation

2nd Floor, Room 3 & 8 11:00-14:00 **SPONSORS SECTION:** Oracle Hrvatska - Presentations (In English)

Infodom - Okrugli stol (In Croatian)

INFODOM

Digitalna transformacija - inovativna paradigma poslovanja Moderatori: Katarina Tomičić-Pupek, Goran Marković i Boris Blumenschein

ORACLE'

Međimurje region

3rd Floor, Faculty Hall

Ivan Delić: Oracle Blockchain Cloud Service - Consensus to Boost The Business Darko Jureković: Oracle Academy - Your **Gateway Into the World of Oracle Technologies**

DAY 3: Frida	y, September 21 st	Location			
Conference S	Sessions				
08:30-09:00	Registration	2 nd Floor, Room 3			
09:00-10:30	Location: 2 nd Floor, Room 3				
	INTELLIGENT INFORMATION SYSTEMS				
	Chair: Jasminka Dobša/Ivan Magdalenić				
	Grega Vrbančič, Iztok Jr. Fister and Vili Podgorelec				
	Designing Deep Neural Network Topologies with Population-Based Metaheuristics	l			
	Iztok Jr. Fister, Grega Vrbančič, Lucija Brezočnik, Vili Podgorelec and Fister	Iztok			
	SportyDataGen: An Online Generator of Endurance Sports Activity				
	Collections				
	Tea Mijač, Mario Jadrić and Maja Ćukušić				
	Evaluating the Potential of a Data-Driven Approach in Digital Service (Re)Design	ce			
10:30-11:00	Coffee Break				
11:00-12:00	Best Paper Award, CECIIS 2019 ANNOUNCEMENT and CECIIS 2018 CONFERENCE CLOSING	2 nd Floor, Room 3			
Parallel Ever	its				
11:00-12:30	HigherDecision project presentations:	3 rd Floor, Faculty Hall			
	How do we make decisions in higher education? - Results of				
	doctoral research in the scope of HigherDecision project (in English)				
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