Date	Session chair	Time	Presentation Title	Presenter	Authors	Organization(s)
		Conference Opening Address: Irena Vodenska				
	Yoshi Fujiwara	**10:00 - 10:20 am (Belgrade time)**	Learning from your neighbour's experience? : Dealing with uncertainty in knowledge acquisition and vicarious learning in the Chinese patent network	ILWON(Veny) Seo	ILWON(Veny) Seo	Chonnam National University (Dept. of Economics)
		10:20 - 10:40 am (Belgrade time)	Graph based approach for discovering disease relations	Jovana Dobreva	Jovana Dobreva (1), Aleksandar Krsteski (1), Mihail Tegovski (1), Kostadin Mishev (1), Irena Vodenska (2), L. T. Chitkushev (2), Dimitar Trajanov (1)	1. Faculty of Computer Science and Engineering, Skopje, North Macedonia 2. Boston University, USA
		10:40 - 11:00 am (Belgrade time)	Bitcoin's crypto flow network	Yoshi FUJIWARA	Yoshi FUJIWARA, Rubaiyat ISLAM	University of Hyogo, Graduate School of Information Science, JAPAN

July 12th		**11:00 - 11:20 am (Belgrade time)**	Multifractality in Nonstationary Financial Time Series	Jae Woo Lee	Jae Woo Lee, Quang Anh Le, Biseko Juma Mafwele, and Chang Hee Choi	Department of Physics, Inha University, Incheon, Republic of Korea
	Dimitar Trajanov	**3:00 - 3:20 pm (Belgrade time)**	Using centrality measures to extract deeper knowledge from cryptocurrencies networks obtained by studying different cryptocurrencies interdependencies.	Ana Todorovska	Ana Todorovska (1), Hristijan Peshov (1), Irena Vodenska (2), L. T. Chitkushev (2), Dimitar Trajanov (1)	1. Faculty of Computer Science and Engineering, Skopje, North Macedonia 2. Boston University, USA
		3:20 - 3:40 pm (Belgrade time)	Irritable Bowel Syndrome as a Comorbidity of Gastroenteritis	Nadia Chitkushev	Nadia Chitkushev, Guanglan Zhang	Boston University, USA
		3:40 - 4:00 pm (Belgrade time)	Topological Data Analysis on Echo Chambers in the SNS Networks	Hiroshi Iyetomi	Hiroshi Iyetomi	Rissho University, Japan
		4:00 - 4:20 pm (Belgrade time)	Random Forest to Reexamine Movie Success Prediction: A Profit Analysis	Thaís Luiza Donega Souza	Thaís Luiza Donega Souza, Marislei Nishijima, Ricardo Pires	School of Science, Arts and Humanities, University of São Paulo, Brazil
		10:00 - 10:20 am (Belgrade time)	Multilayer network analysis of the drugs development cycle in the global pharmaceutical industry	Hiromitsu Goto	Hiromitsu Goto, Mari Jibu, Wataru Souma and Yuichi Ikeda	Kanazawa Gakuin University

	Duk Hee Lee	10:20 - 10:40 am (Belgrade time)	Correlation between the economic policy uncertainty and the geopolitical risk from 1990 to 2020	Wataru Souma	Wataru Souma	Rissho University, Japan
		10:40 - 11:00 am (Belgrade time)	Terrorist Attacks and Corporate Investment: The beneficial value of CEO overconfidence	Seung Hun Han	Seongjae Mun (1), Hyeong Joon Kim (2), Seung Hun Han (2)	1. School of Business Administration, Kyungpook National University, Republic of Korea 2. School of Business and Technology Management, College of Business, Korea Advanced Institute of Science and Technology, Republic of Korea
		11:00 - 11:20 am (Belgrade time)	Comparing Finance and Machine Learning from an Ethical Perspective	Maryan Rizinski	Maryan Rizinski (1), Kostadin Mishev (1), Dimitar Trajanov (1), Irena Vodenska (2),L. T. Chitkushev (2)	1. Faculty of Computer Science and Engineering, Skopje, North Macedonia 2. Boston University, USA

July 13th	Nadia Chitkushev	3:00 - 3:20 pm (Belgrade time)	The effect of income in the network of international trade of nutrients from food for human consumption	Flavia Mori Sarti	Flavia Mori Sarti (1), Murilo Mazzotti Silvestrini (2), Nick W. Smith (3,4), Andrew J. Fletcher (3,4,5), Warren C. McNabb (3,4)	1. School of Arts, Sciences and Humanities, University of Sao Paulo, Brazil 2. Economics Institute, State University of Campinas, Brazil 3. Riddet Institute, Massey University, New Zealand 4. Sustainable Nutrition Initiative, Riddet Institute, Massey University, New Zealand 5. Fonterra Research and Development Centre, New Zealand
		3:20 - 3:40 pm (Belgrade time)	Rapid sequencing to vaccine design	Derin B. Keskin	Derin B. Keskin	Dana Farber Cancer Institute, Boston University

		3:40 - 4:00 pm (Belgrade time)	Public Health Risk to Economic Growth: The case of the U.S.	Irena Vodenska	Irena Vodenska, Jonathan Barlow	Boston University, USA
		4:00 - 4:20 pm (Belgrade time)	The influence of stock market indexes (S&P500 and Dow Jones) on cryptocurrencies prices.	Gorast Angelovski	Gorast Angelovski (1), Ana Todorovska (1), Ivan Rusevski (1), Irena Vodenska (2), L. T. Chitkushev (2), Dimitar Trajanov (1)	1. Faculty of Computer Science and Engineering, Skopje, North Macedonia 2. Boston University, USA

	Hideaki Aoyama	10:00 - 10:20 am (Belgrade time)	New Metal Index, a new financial tool that uses Evolutionary Algorithm: Minimization of financial asset volatility and preservation of long-term value	Tianhong Cai	Tianhong Cai (1) (2), Xiaoman Ding (2), Xiuping Hua (1) (3), Anthony Bellotti (2), Irena Vodenska (4), Vladimir Brusic (2)	1. UNNC-NFTZ Blockchain Laboratory, Ningbo, China 2. School of Computer Science, University of Nottingham Ningbo China, Ningbo, China 3. Nottingham University Business School China, University of Nottingham Ningbo China, Ningbo, China 4. Department of Administrative Sciences, Metropolitan College, Boston University, Boston, USA
		10:20 - 10:40 am (Belgrade time)	XRP Network and Proposal of Flow Index	Hideaki Aoyama	Hideaki Aoyama	RIETI and RIKEN iTHEMS, Japan
		10:40 - 11:00 am (Belgrade time)	PERSONALIZED HEART HEALTH MONITORING - BIG DATA IN SMART HEALTH HOME	Yinglun Li	Yinglun Li, Xiang ZHANG, Matthew Pike, Vladimir Brusic	School of Computer Science, University of Nottingham Ningbo China, Ningbo, China

July 14th		11:00 - 11:20 am (Belgrade time)	Single Cell Transcriptome Analysis of Peripheral Blood in CLL Patients for the Assessment of Therapy Efficacy	Minjie Lyu	Minjie Lyu (1), Huan Jin (1), Anthony G. Bellotti (1), Derin B. Keskin (2), Vladimir Brusic (1)	1. School of Computer Science, University of Nottingham Ningbo China, Ningbo, China 2. Dana-Farber Cancer Institute, Harvard Medical School, Boston USA
		11:20 - 11:40 am (Belgrade time)	Birds of a Feather Flock Together, But Do They Go Further? : The Effect of Social Connections on Startup Investments	Duk Hee Lee	Duk Hee Lee (1), Sangmin Lim (2), Ohsung Kwon (3)	1. KAIST, Korea 2. Samsung SDS, 3. Korea Institute for Industrial Economics and Trade
		3:00 - 3:20 pm (Belgrade time)	Medical Expenditures of Diabetes-Related Hospitalizations in the United States	Guanglan Zhang	Guanglan Zhang, Lin Chen, Wenhong Yan, L. T. Chitkushev	Boston University, USA

	Ana Todorovska	3:20 - 3:40 pm (Belgrade time)	Single cell transcriptomics and tumor antigens for diagnostics personalized cancer treatment	Lou Chitkushev	Lou Chitkushev (1), Guanglan Zhang (1) , Minjie Lyu (3), Derin Keskin (2) , Vladimir Brusic (3)	1. Health Informatics Lab, MET, Boston University 2. Translational Immuno-Genomics Lab, Dana-Farber Cancer Institute, Harvard Medical School 3. School of Computer Science, University of Nottingham Ningbo China
		3:40 - 4:00 pm (Belgrade time)	Human Disease Network compared with the patients diagnose history - PH Network	Aleksandar Krsteski	Aleksandar Krsteski (1), Jovana Dobreva (1), Mihail Tegovski (1), Marija Cvetanoska (1), Kostadin Mishev (1), Irena Vodenska (2), L. T. Chitkushev (2), Dimitar Trajanov (1)	1. Faculty of Computer Science and Engineering, Skopje, North Macedonia 2. Boston University, USA

| | | 4:00 - 4:20 pm (Belgrade time) | Glove and Word2Vec embedding models for disease representation | Marija Cvetanoska | Marija Cvetanoska (1), Jovana Dobreva (1), Kostadin Mishev (1), Irena Vodenska (2), L. T. Chitkushev (2), Dimitar Trajanov (1) | 1. Faculty of Computer Science and Engineering, Skopje, North Macedonia 2. Boston University, USA |

Conference Closing Address (Next conference): Irena Vodenska