

Detailed schedule

Friday, 20 April 2018

Artificial Intelligence, Robotics, Bioinformatics (Part 1)	
Time: 12:15 - 14:00	Location: Hall 1
Authors	Title
Ivan Todorin and Ivan Trenchev	An off-lattice HP model for protein folding with three componential evaluation function
Georgina Mirceva, Andreja Naumoski and Andrea Kulakov	Protein Binding Sites Prediction by Making Fuzzy-based Selection of the Features
Ljubinka Sandjakoska and Ana Madevska Bogdanova	Deep Learning: The future of chemoinformatics and drug development
Gordana Ispirova, Tome Eftimov and Barbara Koroušić Seljak	Analysis of Medical and Health-Related Data about Adult Obesity using Supervised and Unsupervised Learning
Huseyin Hakli	An improved elephant herding optimization by balancing local and global search for continuous optimization
Petre Lameski, Eftim Zdravevski, Vladimir Trajkovikand Andrea Kulakov	Cloud based Data Acquisition and Annotation Architecture for Weed Control
Marko Docevski, Eftim Zdravevski, Petre Lameski and Andrea Kulakov	Towards music generation with deep learning algorithms

Theoretical Foundations of Informatics, Applied Mathematics (Part 1)	
Time: 15:15 - 16:30	Location: Hall 1
Authors	Title
Natasha Ilievska	A Note On an Error-Detecting Code
Dejan Spasov	On the Complexity of Computing the Hamming Weight
Ljubica Panova and Vesna Dimitrova	Enterprise Information Security and Risk Management
Daniela Mechkaroska, Vesna Dimitrova and Aleksandra Popovska-Mitrovikj	A survey on applications of BlockChain technology
Vesna Dimitrievska Ristovska and Vasil Grozdanov	Irreducible polynomials in the generation of uniformly distributed sequences

Multimedia, Signal Processing, Sensor Systems	
Time: 15:15 - 16:30	Location: Hall 2
Authors	Title
Ivan Kitanovski, Katarina Trojancanec, Ivica Dimitrovski and Suzana Loskovska	Re-ranking candidates using fairness criteria
Adrijan Bozhinovski, Sara Temelkovska and Sanja Mančevska	An Application for Psychological Research using a Modified Stroop Test
Ilija Rumenov, Martina Toceva and Kosta Mitreski	EU directive 2008/50/EC on ambient air quality and cleaner air for Europe in context of the Republic of Macedonia
Sasho Gramatikov, Igor Mishkovski and Milos Jovanovik	Urban traffic simulation for smarter and greener cities
Miodrag Cekikj, Antonio Antovski and Slobodan Kalajzhiski	Practical application of data visualization techniques
Long Ge and Peiyi Zhu	Development of Rapid-Testing Technology for the Screening of Food Safety

eWorld, eBusiness, eCommerce (Part 1)	
Time: 18:15 - 19:45	Location: Hall 1
Authors	Title
Goran Petkovski, Evgenija Stevanoska, Boro Jakimovski and Goran Velinov	Implementation of alert-management system using centralized log server
Andreja Naumoski, Georgina Mirceva and Kosta Mitreski	Geo-reference digitalization of green urban spaces using GIS: A case study of Skopje
Nasi Jofce, Riste Stojanov and Dimitar Trajanov	facetC: Highly customizable and CRUD based facet browser for Semantic Web
Suad Saliu, Sasko Ristov and Marjan Gusev	Improving the efficiency of business processes in catering industry
Aldion Ambari and Adrijan Bozinovski	Importance of Quality Assurance in Software Products
Bojan Despodov, Todor Cekerovski and Zoran Despodov	Aggregator of repositories and archives with the implementation of the protocol OAI-PMH
Rosen Radkov	External factors destabilizing the operation of data centers

Saturday, 21 April 2018

Artificial Intelligence, Robotics, Bioinformatics (Part 2)	
Time: 9:00 - 10:00	Location: Hall 1
Authors	Title
Evgenija Stevanoska, Kristijan Spirovski, Goran Petkovski, Boro Jakimovski and Goran Velinov	Microservice based architecture for the genetic algorithm
Dario Gjorgjevski and Dejan Gjorgjevikj	Using Distributed Representations to Identify Genders and Age Groups of Twitter Users
Gjorgji Madjarov and Dejan Gjorgjevikj	Human activity recognition using unobtrusive and wearable sensors
Vladimir Stojov, Nikola Koteli, Petre Lameski and Eftim Zdravevski	Application of machine learning and time series analysis for air pollution prediction

Education, E-Learning	
Time: 9:00 - 10:00	Location: Hall 2
Authors	Title
Maja Videnovik and Gjorgjina Dimova	Can Blended Learning Environment Increase Quality of Learning?
Ylber Januzaj, Artan Luma, Azir Aliu, Besnik Selimi, Bujar Raufi and Halil Snopce	The need for an automated model which makes matching between job market demand and University Curricula
Maja Videnovik and Aleksandar Karadimche	Introduction of 21st Century skills in primary schools: case study Macedonia
Mirjana Trompeska and Blagoj Ristevski	Analysis of Using Information and Communication Technologies in Mathematics Courses in the Republic of Macedonia

Parallel Processing, Cloud Computing, Computer Networks	
Time: 11:00 - 12:15	Location: Hall 1
Authors	Title
Igor Mishkovski, Miroslav Mirchev and Milos Jovanovik	Anti-virus Engine Analysis using Deep Web Malware Data
Zlate Dodevski and Vladimir Trajkovik	Decentralizing the health information exchange systems – A blockchain based approach
Tihomir Tenev and Dimitar Birov	Security patterns for microservice accounts and identity
Bogdan Jeliskoski, Biljana Stojcevska and Adrijan Bozinovski	Securing a Home Network by Using Raspberry Pi as a VPN Gateway
Kostadin Mishev, Aleksandar Stojmenski, Goran Petrevski, Boro Jakimovski, Vesna Dimitrova, Ivan Chorbev and Ivica Dimitrovski	Identity Provider Management System for University Services
Rosen Radkov	Analysis and evaluation of a Data Center quality indicators

eWorld, eBusiness, eCommerce (Part 2)	
Time: 15:00 - 16:15	Location: Hall 1
Authors	Title
Aleksandra Karadja, Veno Pachovski, Marjan Bojadjev and Marija Andonova	Digitalization of banking services as a driving force towards profitability – Comparative analysis of the Macedonian banking sector with a focus on the IT perspective
Kiril Kirovski and Smilka Janeska-Sarkanjac	Netflix - an example of a disruptive innovation business model
Ana Gjorgjevikj, Kostadin Mishev and Dimitar Trajanov	Foreign Direct Investment Net Inflows: Determinants and Prediction Models
Kostadin Mishev, Ana Gjorgjevikj and Dimitar Trajanov	Big data-based platform for country economic stability
Nikola Skenderov, Elizabeta Maneska and Vlatko Grujoski	Usage and acceptance of m-commerce among the citizens of the Republic of Macedonia

Theoretical Foundations of Informatics, Applied Mathematics (Part 2)	
Time: 17:30 - 18:45	Location: Hall 1
Authors	Title
Aleksandra Stojanova, Natasha Stojkovikj, Limonka Koceva Lazarova, Biljana Zlatanovska, Marija Miteva and Mirjana Kocaleva	Statistical methods in credit risk modeling
Radoslav Mavrevski and Metodi Traykov	Building and selection an optimal mathematical model describing a scientific or engineering process
Katerina Bashova, Veno Pachovski and Adrijan Božinovski	Using QR codes for easier and more secured business communication
Gordana Ispirova, Tome Eftimov and Barbara Koroušić Seljak	Overview of Creativity Assessment Framework for a Computer Program
Stoyan Kapralov, Valentin Bakoev and Kaloyan Kapralov	Enumeration of the Closed Knight's Paths of Length 10
Mohammed O. Al-Amr	Solution of the coupled Boussinesq–Burger's equations by reduced differential transform method

Student papers

Saturday, 21 April 2018

Student Session (Part 1)	
Time: 11:00 - 12:15	Location: Hall 2
Authors	Title
Martina Toshevska and Slobodan Kalajdziski	Discovering API Related Functions with Spectral Clustering
Frosina Stojanovska, Viktorija Velinovska, Monika Simjanoska and Ana Madevska Bogdanova	Two-phase Classification of Colorectal Cancer Stages
Aleksandra Petrova, Ilinka Ivanoska and Kire Trivodaliev	Functional Magnetic Resonance Imaging, Data Acquisition, Processing, and Applications: A Survey
Bozhidar Stevanoski and Alisa Krstova	Evaluating techniques for building a university course recommendation engine
Alisa Krstova, Lodi Dodevska and Sonja Gievska	Detecting customer sentiment in Amazon product review data
Ivona Najdenkoska, Frosina Stojanovska and Sonja Gievska	Detecting emotions in tweets based on hybrid approach

Student Session (Part 2)	
Time: 15:00 - 16:15	Location: Hall 2
Authors	Title
Ivana Kozolovska, Bojana Koteska, Monika Simjanoska and Ana Madevska Bogdanova	Real Time Remote Monitoring of Vital Parameters in Emergency Situations
Dimitri Dojchinovski and Andrej Ilievski	AQI measuring station with Alexa integration
Andrej Jovanov, Robert Stoimenov and Biljana Stojkoska	Exploring different heuristics for WSN localization based on trilateration
Nikola Tasevski and Stefan Tasevski	Smart Braille – Accessibility is the key
Andrej Jovanov, Jane Lameski, Vesna Kirandziska and Nevena Ackovska	Experiences of student's projects for the course Microprocessing systems
Lidija Jovanovska, Antonio Dimovski, Bojana Cvetkovska and Boban Joksimoski	Educational digital environment for learning historical events

Student Session (Part 3)	
Time: 17:30 - 18:45	Location: Hall 2
Authors	Title
Stefan Dzalev, Dajana Stojchevska, Ivana Stojkovska and Dimitar Trajanov	Visualizing real-time global assaults
Arijan Asani, Zoran Kotevski and Nikola Rendevski	Multimedia coding and processing techniques in WMSN: A survey
Dime Boshkovski	Cryptography in Internet of Things
Borche Davchev	Adversary Model for Machine Learning
Zorica Stefanovska and Vekoslav Stefanovski	Automatic detection of computational complexity of dynamic programming algorithms
Andrej Angelovski, Kliment Serafimov and Mile Jovanov	New youth initiative for advanced STEM education
Marija Todosovska, Simon Hermann and Dajana Stojchevska	TurtleBot: navigation and image processing