

# EJC 2018 Conference Program

## Monday, June 4

15:00 - 15:15 Transfer from Astor Riga Hotel to Transport and Telecommunication Institute (TTI)

15:30 - 15:45 Welcome coffee at TTI

15:45 - 16:15 **Welcome speech and presentation about TTI**

*Vice-Rector for Science and Development Affairs, Professor, Dr.Sc.Ing. Irina Yatskiv*

16:15 - 16:45 **Keynote: "Simulation as a decision support tool"**

*Dean of Computer Science and Telecommunication Faculty, Mihails Savrasovs*

16:45 - 17:15 **Excursion at Transport and Telecommunication Institute**

- Telecommunications, electronics and robotics center
- Robotic technologies class
- Image Processing, Biometry & Automated Border Control Systems laboratory

17:15 - 17:45 Coffee, cooperation discussion and photo

17:45 - 18:00 Transfer from TTI to Astor Riga Hotel

18:00 - 20:00 **Welcome Reception and Registration at Astor Riga Hotel**

## Tuesday, June 5

08:30 - 09:30 **Registration**

09:30 - 09:45 Opening

09:45 - 10:30 **Keynote: "The Power of Massive Invariant Environments"**

*Member of board and co-founder of Latvian Blockchain Association, Anatoly Ressin*

10:30 - 10:50 **Coffee break**

10:50 - 12:30 Appetizer Session

12:30 - 14:00 **Lunch**

14:00 - 15:40 **Session: Mathematics and Data Mining**

Paper 822 (30min), "Goal-Oriented Adaptive and Extensible Study-Process Creation with Optimal Cyclic-Learning in Graph-Structured Knowledge"

*Ryosuke Konishi, Yasushi Kiyoki*

Paper 818 (20min), "A Process Calculus for Design and Modeling of Retro-synthesis"

*Gabriel Broholm, Maliina Hammeken, Marcus Skov Hansen, Alexander Juhl, Marc Storm Larsen, Jørgen Fischer Nilsson, Thomas Pethick, Magnus Gether Sørensen*

Paper 808 (15min), "The Discreet Event Approach to Simulate Stochastic Multi-Product (Q, r) Inventory Control Systems"

*Ilya Jackson, Juris Tolujevs*

Paper 829 (30min), "A Semantic Orthogonal Mapping Method through Deep-learning for Semantic Computing"

*Xing Chen, Yasushi Kiyoki*

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15:40 - 16:00 **Coffee break**

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16:00 - 18:20 **Session: Culture and Data Support**

Paper 803 (30min), "Modelling Cultures"

*Hannu Jaakkola, Bernhard Thalheim*

Paper 836 (30min), "Clutter Reduction in Parallel Coordinates Using Aesthetic Criteria"

*Anastasija Hismutova, Irina Yatskiv*

Paper 847 (20min), "Toward Manageable Data Sources"

*Pekka Sillberg*

Paper 839 (20min), "Flexible Data Management in Evolving Research Projects"

*Yannic Ole Kropp, Bernhard Thalheim*

Paper 852 (20min), "Shopping mall environmental impact evaluation based on microscopic traffic flow simulation"

*Mihails Savrasovs, Ioannis Karakikes, Irina Pticina*

Paper 849 (20min), "S-BPM-Modelling for Underwater Cooperation and Coordination of Manned and Unmanned Platforms"

*Ivor Nissen, Frank Kramer, Bernhard Thalheim*

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## Wednesday, June 6

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08:00 - 08:50 **Panel Session: AI & Environment Engineering**

"Future Directions of AI, Knowledge Base and Environmental Engineering towards 2025"

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08:50 - 09:00 **Coffee break**

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09:00 - 10:40 **Session: Environment Science and Knowledge System**

Paper 835 (30min), "A Semantic-Associative Computing System with Multi-Dimensional World Map for Ocean-Environment Analysis"

*Yasushi Kiyoki, Xing Chen, Chalisa Veasommai, Jinmika Wijitdechakul, Shiori Sasaki, Chawan Koopipat, Petchporn Chawakitchareon*

Paper 834 (30min), "Best Energy Mixture Model and Electricity Generation Simulation Approach Case Study Latvia"

*Tatiana Endrjukaite, Alexander Dudko, Kunihiko Okano, Hiromi Yamamoto*

Paper 828 (20min), "Automatic Feature Extraction and Classification Model for Detecting Thai Clickbait Headlines using Convolutional Neural Network"

*Sarawoot Kongyoung, Anocha Rugchatjaroen, Natsuda Kaothanthong*

Paper 832 (20min), "A Multi-Parameterized Water Quality Prediction Method with Differential Computing Among Sampling Sites"  
*Khoumkham Ladsavong, Petchporn Chawakitchareon, Kiyoki Yasushi*

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10:40 - 11:00 **Coffee break**

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11:00 - 12:40 **Session: Concepts and Logics**

Paper 833 (20min), "Identification Of Mobile Patterns For Efficient And Successful Work With The Mobile User Interface"

*Maja Pušnik, Dimitar Ivanovski, Tatjana Welzer Družovec, Boštjan Šumak*

Paper 825 (30min), "Type checking algorithm for the TIL-Script language"

*Marie Duží, Michal Fait*

Paper 826 (30min), "Natural Deduction System in the TIL-Script Language"

*Marie Duží, Marek Menšík, Miroslav Pajr, Vojtěch Patschka*

Paper 820 (15min), "Giving a Frame to the Concept Space"

*Elvira Immacolata Locuratolo*

Paper 802 (20min), "Constraint Programming Based on Matrix-like Representation of Qualitative Constraints"

*Alexander Zuenko, Yirii Oleynik*

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13:00 - 13:30 **Transfer to Jurmala**

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13:30 - 15:00 **Lunch in Jurmala City**

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15:00 - 17:00 **Jurmala Sightseeing Tour**

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17:00 - 17:30 **Transfer to Riga**

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17:30 - 19:30 **Sightseeing Tour of Old Riga**

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## Thursday, June 7

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09:00 - 10:20 **Session: Environment Science and Knowledge System**

Paper 844 (30min), "Application of 5D World Map System to Large News-Article Database for Realizing Context-Diversity-Responsive Semantic Associative Search"

*Shiori Sasaki, Yasushi Kiyoki, Hanako Fujioka, Toshihiro Watabane, Kyohei Otsuka, Masayuki Ishii*

Paper 837 (30min), "An environmental-semantic computing system of multispectral imagery for coral health monitoring and analysis"

*Jinmika Wijitdechakul, Yasushi Kiyoki, Chawan Koopipat*

Paper 845 (20min), "Relationship between Vegetation Indices and SPAD Values of Waxy Corn using an Unmanned Aerial Vehicle"

*Panath Jermthaisong, Sununtha Kingpaiboon, Petchporn Chawakitchareon, Yasushi Kiyoki*

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10:20 - 10:40 **Coffee break**

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10:40 - 12:00 **Session: Environment Science and Knowledge System**

Paper 824 (20min), "Christian Elements in the News: Analyzing the News Coverage of the Great Tohoku Earthquake in Japan, Germany and the USA"

*Yukiko Sato, Stefan Brückner*

Paper 846 (20min), "An Information Retrieval Approach for Text Mining of Medical Records based on Graph Descriptor"

*Alexander Dudko, Tatiana Endrjukaite, Yasushi Kiyoki*

Paper 843 (30min), "A New Approach of Semantic Computing with Interval Matrix Decomposition for Interpreting Deforestation Phenomenon"

*Irene Erlyn Wina Rachmawan, Yasushi Kiyoki*

Paper 831 (20min), "Emotion-Expression Robot With Global Evaluation Reflecting Multiple and Heterogeneous Sensing Elements"

*Yoshiko Itabashi, Yasushi Kiyoki*

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12:00 - 13:30 **Lunch**

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13:30 - 15:00 **Session: Environment Science and Knowledge System**

Paper 842 (30min), "An Information Providing Method To Express Train Service Situation By Combining Multiple Sign-logo Images"

*Yasuhiro Hayashi, Daisuke Oyokawa, Yasushi Kiyoki, Tetsuya Mita*

Paper 819 (30min), "A Sensor Selection and Learning Method for Credibility Assessment Using Sensor Data"

*Ken Honda, Naofumi Yoshida*

Paper 811 (30min), "Semantic-Dependent Access Log Analysis for Predicting the Demographic Data"

*Kyohei Matsumoto, Takafumi Nakanishi, Takashi Kitagawa*

Paper 827 (30min), "A Correlation Computing Method for Integrating Passengers and Services in Semantic Anticipation"

*Motoki Yokoyama, Yasushi Kiyoki, Tetsuya Mita*

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15:00 - 15:20 **Coffee break**

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15:20 - 17:20 **Session: Environment Science and Knowledge System**

Paper 813 (15min), "Prediction model of accumulated weight in truck during sugarcane harvesting"

*Khwantri Saengprachatanarug, Seree Wongphichet, Janpen Tosoongneun*

Paper 838 (15min), "In vitro coral bleach observation using RGB-IR camera"

*Pracharat Sa-ngadsup, Yasushi Kiyoki, Chawan Koopipat*

Paper 850 (15min), "Consideration of the likeness preference for printed images based on Object Dependence of Edge Enhancement Effect"

*Aran Hansuebsai, Krairop Chareonsopa*

Paper 840 (30min), "An Environmental Semantic Search-Space Creation Method for News-Article Search Systems with Context-Oriented Interpretations"

*Hanako Fujioka, Shiori Sasaki, Toshihiro Watanabe, Kyohei Otsuka, Masayuki Ishii, Yasushi Kiyoki*

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19:00 - 21:30 **Gala Dinner at Restaurant “Biblioteka No1”**

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**Friday, June 8**

09:00 - 11:00 **Session: Citizen Science**

Paper 810 (30min), “Making Explainable Recommendations within an Intelligent Information System”

*Terrance Goan*

Paper 805 (30min), “Event Based Social Networks for Coping Loneliness in Smart Cities”

*Nikita Kovalevskiy, Ajantha Dahanayake, Tatiana Zudilova*

Paper 806 (20min), “Design of Citizen Database for forest incident reporting system in Finland”

*Nikita Tiufiakov, Andrei Gorbulin, Shekhar Aryal, Oleg Vasiltssov, Ajantha Dahanayake, Tatiana Zudilova*

Paper 848 (20min), “Optimizing locations of social and health care service centers using location-allocation tools”

*Timo Widbom, Tarmo Lipping*

Paper 807 (15min), “Feasibility and system architecture for Vision Field Measurement using Virtual Reality Technology”

*Eemeli Manninen, Henrik Valve, Sankha Amarakoon, Ajantha Dahanayake*

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11:00 - 11:20 **Closing**

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11:30 - 13:00 **Lunch**

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