

# ISMIS 2020 Schedule

All times CEST!

**Note: conference participants will receive additional access information regarding papers and presentation videos.**

## Wednesday, 23.09.2020

15:00 - 15:30: Welcome

15:30 - 19:00: **Extremely important: watch the presentation videos ahead of the below mentioned sessions!**

## Thursday, 24.09.2020

15:00 - 15:30: Invited Talk 1 (Session Chair: Alexander Felfernig)

Robin Burke. Fairness is not a number: Methodological implications of the politics of fairness-aware systems

15:35 - 15:50: Best Paper Nominees (Session Chair: Denis Helic)

3 Papers

- Laurel Powell, Anna Gelich and Zbigniew Ras: The Construction of Action Rules to Raise Artwork Prices
- Jinfu Ren, Yang Liu and Jiming Liu: Metric-Guided Multi-Task Learning
- Katarzyna Biesialska, Magdalena Biesialska and Henryk Rybiński: Sentiment Analysis with Contextual Embeddings and Self-Attention

15:55 - 16:10: Best Student Paper Nominees (Session Chair: Gerhard Leitner)

3 Papers

- Adam Gabriel Dobrakowski, Agnieszka Mykowiecka, Małgorzata Marciniak, Wojciech Jaworski and Przemysław Biecek. Interpretable Segmentation of Medical Free-Text Records Based on Word Embeddings

- Stefan Plappert, Paul Christoph Gembarski and Roland Lachmayer. Decision-Making with Probabilistic Reasoning in Engineering Design
- Tomaž Stepišnik and Dragi Kocev. Hyperbolic embeddings for hierarchical multi-label classification

16:10 - 16:40: Break

16:40 - 17:05: Natural Language Processing (Session Chair: Zbyszek Ras)

5 Papers

- Radomir Popovic, Florian Lemmerich and Markus Strohmaier. Joint Multiclass Debiasing of Word Embeddings
- Alexander Chernyavskiy and Dmitry Ilvovsky. Recursive Neural Text Classification using Discourse Tree Structure for Argumentation Mining and Sentiment Analysis Tasks
- Sergiu Gordea. Named Entity Recommendations to Enhance Multilingual Retrieval in Europeana.eu
- Elio Masciari, Vincenzo Moscato, Antonio Picariello and Giancarlo Sperli. A Deep Learning Approach to Fake News Detection
- Yue Zhou, Yan Zhang and Jingtao Yao. Satirical News Detection with Semantic Feature Extraction and Game-theoretic Rough Sets

17:10 - 17:40: Deep Learning & Embeddings (Session Chair: Martin Stettinger)

6 Papers

- Tiago Mendes-Neves and João Mendes-Moreira. Comparing state-of-the-art neural network ensemble methods in soccer predictions
- Jacek Grekow. Static Music Emotion Recognition Using Recurrent Neural Networks
- Annalisa Appice, Francesco Lomuscio, Antonella Falini, Cristiano Tamborrino, Francesca Mazzia and Donato Malerba. Saliency detection in hyperspectral images using autoencoder-based data reconstruction
- Qi Tan, Yang Liu and Jiming Liu. Mesoscale Anisotropically-Connected Learning
- Tomislav Duricic, Hussain Hussain, Emanuel Lacic, Dominik Kowald, Denis Helic and Elisabeth Lex. Empirical Comparison of Graph Embeddings for Trust-Based Collaborative Filtering
- Konrad Ciecierski. Neural spike sorting using unsupervised adversarial learning

17:45 - 18:15: Digital Signal Processing (Session Chair: Gerhard Leitner)

6 Papers

- Saketh Saxena, Philip Heller, Amanda Kahn and Ivano Aiello. Poriferal Vision: Classifying benthic sponge spicules to assess historical impacts of marine climate change
- Ning Dong, Yusuke Hatae, Muhammad Fikko Fadjrimiratno, Tetsu Matsukawa and Einoshin Suzuki. Experimental Evaluation of GAN-Based One-Class Anomaly Detection on Office Monitoring
- Szymon Zaporowski and Bozena Kostek. Ranking Speech Features for their Usage in Singing Classification
- Corrado Loglisci, Marco Zappatore, Antonella Longo, Mario Bochicchio and Donato Malerba. Leveraging Machine Learning in IoT to predict the trustworthiness of Mobile Crowd Sensing data
- Ayman Hajja and Justin Willis. A Hierarchical-Based Web-Platform for Crowdsourcing Distinguishable Image Patches
- Marcus Bloice, Peter Roth and Andreas Holzinger. Performing Arithmetic Using a Neural Network Trained on Digit Permutation Pairs

18:20 - 19:55: Modelling & Reasoning (Session Chair: Alexander Felfernig)

7 Papers

- Edi Muskardin, Ingo Pill and Franz Wotawa. CatIO - Framework for Model Based Diagnosis of Cyber-Physical Systems
- Juba Agoun and Mohand-Saïd Hacid Mohand-Saïd Hacid. Data Publishing: Availability of data under Security Policies – Preliminary work
- Seda Polat Erdeniz, Ralph Samer and Muesluem Atas. Matrix Factorization based Heuristics Learning for Solving Constraint Satisfaction Problems
- Franz Wotawa and Lorenz Klampfl. Explaining object motion using answer set programming
- Stefano Ferilli and Domenico Redavid. The GraphBRAIN System for Knowledge Graph Management and Advanced Fruition
- Florian Lemmerich, Christoph Kiefer, Benedikt Langenberg, Jeffrey Cacho Aboukhalil and Axel Mayer. Mining Exceptional Mediation Models
- Christian Vidal Silva, Alexander Felfernig, Jose Galindo, Müslüm Atas and David Benavides. A Parallelized Variant of Junker's QUICKXPLAIN Algorithm

Friday, 25.09.2020

15:00 - 15:30: Invited Talk 2 (Session Chair: Gerhard Leitner)

Marko Tkalcić. Complementing Behavioural Modeling with Cognitive Modeling for Better Recommendations

15:35 - 16:05: Invited Talk 3 (Session Chair: Denis Helic)

Robert West. Brevity

16:10 - 16:40: Machine Learning Applications (Session Chair: Denis Helic)

6 Papers

- Tomaž Stepišnik and Dragi Kocev. Multivariate predictive clustering trees for classification
- Nicolas Wagner, Violaine Antoine, Jonas Koko, Marie-Madeleine Mialon, Romain Lardy and Isabelle Veissier. Comparison of Machine Learning Methods to Detect Anomalies in the Activity of Dairy Cows
- Mieczysław Kłopotek and Robert Kłopotek. Clustering Algorithm Consistency in Fixed Dimensional Spaces
- Matej Petković, Michelangelo Ceci, Kristian Kersting and Saso Dzeroski. Estimating the Importance of Relational Features by using Gradient Boosting
- Xingjian Liu, Fan Zhang, Xianghua Li, Chao Gao and Jiming Liu. Multi-objective Discrete Moth-Flame Optimization for Complex Network Clustering
- Martin Breskvar and Saso Dzeroski. Predicting associations between proteins and multiple diseases

16:45 - 17:20: Short Papers (Session Chair: Alexander Felfernig)

7 Papers

- Erich Teppan and Markus Zanker. Exploiting Answer Set Programming for Building Explainable Recommendations
- Andreas Falkner, Alexander Schörghuber and Gottfried Schenner. Tailoring Random Forest for Requirements Classification
- Troels Andreasen, Henrik Bulskov and Jørgen Fischer Nilsson. On the Design of a Natural Logic System for Knowledge Bases
- Julian Tritscher, Markus Ring, Daniel Schlör, Lena Hettlinger and Andreas Hotho. Evaluation of post-hoc XAI approaches through synthetic tabular data
- Konstantin Kobs, Michael Steininger, Albin Zehe, Florian Lautenschlager and Andreas Hotho. SimLoss: Class Similarities in Cross Entropy
- Mikkel Pedersen, Henning Christiansen and Nessn Asawi. Efficient and Precise Classification of CT Scannings of Renal Tumors using Convolutional Neural Networks
- Francesco Scicchitano, Angelica Liguori, Massimo Guarascio, Ettore Ritacco and Giuseppe Manco. Deep Autoencoder Ensembles for Anomaly Detection on Blockchain

17:20 - 17:40: Break

17:40 - 18:15 Industry Session 1 (Session Chair: Martin Stettinger)

7 Papers

- Elzbieta Kubera, Alicja Wiczorkowska and Andrzej Kuranc. Parameter Tuning for Speed Changes Detection in On-Road Audio Recordings of Single Drives
- Stefano Ferilli and Giovanni Luca Izzi. Automatic Stopwords Identification from Very Small Corpora
- Damian Węgrzyn, Piotr Wrzeciono and Alicja Wiczorkowska. Recognition of the Flue Pipe Type Using Deep Learning
- Lothar Hotz, Rainer Herzog and Stephanie von Riegen. Adaptive Autonomous Machines – Modeling and Architecture
- Frej Berglind, Jianhua Chen and Alexandros Sopasakis. Deep Distributional Temporal Difference Learning for Game Playing
- Cristian Vidal-Silva, José Ángel Galindo, Jesús Giráldez-Cru and David Benavides. Automated completion of partial configurations as a diagnosis task. Using FastDiag to improve performance
- Anna Saranti, Simon Streit, Deepika Singh, Andreas Holzinger and Heimo Müller. Towards Visual concept learning and reasoning: On insights into representative approaches

18:20 - 18:55: Industry Session 2 (Session Chair: Zbyszek Ras)

7 Papers

- Piotr Borkowski, Krzysztof Ciesielski and Mieczysław Kłopotek. The Impact of Supercategory Inclusion on Semantic Classifier Performance
- Chiara Grosso and Cipriano Forza. Exploring configurator users' motivational drivers for digital social interaction
- Azim Roussanaly, Marharyta Aleksandrova and Anne Boyer. BacAnalytics: A Tool to Support Secondary School Examination in France
- Angel Luis Garrido, Ignacio Romero, Jorge Estrada and Eduardo Mena. Impact of the Application of Artificial Intelligence Technologies in a Content Management System of a Media
- Marie Le Guilly, Claudia Capo, Jean-Marc Petit, Marian Scuturici, Rémi Revellin, Jocelyn Bonjour and Gérald Cavalier. Attempt to better trust classification models: Application to the Ageing of Refrigerated Transport Vehicles
- Antoni Ligęza, Paweł Jemioło, Weronika T. Adrian, Bernadetta Stachura-Terlecka, Mateusz Ślęzyński, Krystian Jobczyk, Krzysztof Kluza, Piotr Wisniewski and Marek Adrian. Explainable Artificial Intelligence. Model Discovery with Constraint Programming.
- Le Viet-Man, Trang Tran and Alexander Felfernig. A Conversion of Feature Models into an Executable Representation in Microsoft Excel

18:55 - 19:10 Best Paper Awards & Conference Closing