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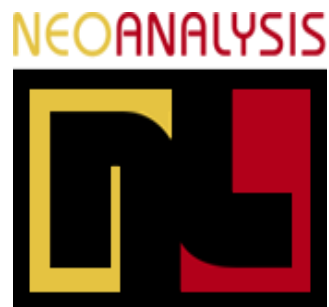
The Conference is held under the auspices of the

Institute of Intelligent Systems



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The timetable of ITS2020 Conference corresponds to **Eastern European Summer Time (EEST); UTC+3 hours**

All presenters are required to join the platform at the beginning of their paper's/poster's session.

- * **Full paper (FP)** presentations should have a **30' max.** duration including Q&A
- * **Short paper (SP)** presentations should have a **20' max.** duration including Q&A
- * **Poster (Po)** presentations should have a **15' max.** duration including Q&A

ITS 2020 Program ♦ Workshops and Tutorials ♦ **Monday June 8, 2020** ♦

Online platform test meeting	All registrants are required to join the test-meeting to get acquainted with the online platform through a presentation of its technical features	16:00-17:00
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ITS 2020 Program ♦ Workshops and Tutorials ♦ **Tuesday June 9, 2020** ♦

	Title	Organizers	Time
Tutorial	ASSET Learning programme model and accompanying tools	Eleni Aikaterini Leligou, University of West Attica Panagiotis Karkazis, University of West Attica	10:00 – 12 :30
Presentation	Microsoft Technologies to Support ML & AI	Eva Angelopoulou, Dimitris Koutsanastasis - <i>Data & AI Specialists Microsoft Greece, Cyprus & Malta</i>	12:30- 13:10
	Break		
Workshop	Intelligence Support for Mentoring Processes in Higher Education (IMHE 2020)	Ralf Klamma, RWTH Aachen University Milos Kravcik, DFKI Elvira Popescu, University of Craiova Viktoria Pammer-Schindler, Graz University of Technology	14:00 – 17:00

ITS 2020 Program ♦ Conference ♦ Wednesday June 10, 2020 ♦

09:30	<p align="center">Opening / Greetings</p> <p align="center"><i>Dr. Clio Sgouropoulou - General Conference Chair</i></p> <p align="center"><i>Dr. Claude Frasson – President of the ITS Steering Committee</i></p> <p align="center"><i>Dr. Christos Troussas & Dr. Vivekanandan Kumar - Program Committee Chairs</i></p> <p align="center"><i>Dr. Kyriaki Panourgia - Organization Chair</i></p> <p align="center"><i>Ploutarchos Rigas - Microsoft Greece, Cyprus & Malta</i></p>
10:00 – 11:00	<p align="center">Keynote Speaker: Luca Chittaro</p> <p align="center">Learning and Retention through VR and Serious Games: aviation safety as a paradigmatic example</p>
11:00 – 12:30	<p><u>Session 1</u> Session Chair: Dr. Christos Troussas</p> <p><i>Lixin Zhao, Xiaoxia Shen, Wu-Yuin Hwang and Timothy K. Shih</i> #32: The Factors Influencing the Participation of Face-to-face Discussion and Online Synchronous Discussion in Class (FP)</p> <p><i>Laila Alrajhi, Khulood Alharbi and Alexandra Cristea</i> #42: A Multidimensional Learners’ Model to Identify Urgent Instructor Intervention Need in MOOC Forum Posts (FP)</p> <p><i>P.M. Moreno-Marcos, D. Martínez de la Torre, G. González Castro, P. J. Muñoz-Merino and C. Delgado Kloos</i> #44: Should we consider Efficiency and Constancy for Adaptation in Intelligent Tutoring Systems? (FP)</p>
	<p align="center">30 min. Break</p>
13:00 – 15:00	<p><u>Session 2</u> Session Chair: Dr. Akrivi Krouska</p> <p><i>Eleni Fotopoulou, Anastasios Zafeiropoulos, Michalis Feidakis, Dimitrios Metafas and Symeon Papavassiliou</i> #45: An Interactive Recommender System based on Reinforcement Learning for Improving Emotional Competences in Educational Groups (FP)</p> <p><i>Kyparissia Papanikolaou, Maria Tzelepi, Maria Moundridou and Ioannis Petroulis</i></p>

#59: Employing Social Network Analysis to enhance community learning (FP)

Stergios Tegos, Georgios Psathas, Thrasyvoulos Tsiatsos, Christos Katsanos, Anastasios Karakostas, Costas Tsibanis and Stavros Demetriadis

#51: Enriching Synchronous Collaboration in Online Courses with Configurable Conversational Agents (FP)

Khulood Alharbi, Alexandra Cristea, Laila Alrajhi, Ig Ibert Bittencourt, Seiji Isotani and Annie James

#26: Data-Driven Analysis of Engagement in Gamified Learning Environments: a methodology for real-time measurement of MOOCs (FP)

30 min. Break

15:30

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17:00

Session 3

Session Chair: **Dr. Anastasios Tsolakidis**

Tahani Aljohani, Filipe Dwan Pereira, Alexandra I. Cristea and Elaine Oliveira

#28: Prediction of Users' Professional Profile in MOOCs Only by Utilising Learners' Written Texts (FP)

Filipe Dwan Pereira, Armando Toda, Elaine H. T. Oliveira, Alexandra Cristea, Seiji Isotani, Dion Laranjeira, Adriano P. Almeida and Jonas Mendonça

#46: Can we use Gamification to predict students' performance? A case study supported by an online judge (FP)

Béatrice Moissinac and Aditya Vempaty

#25: Mixed Compensation Multidimensional Item Response Theory (FP)

	30 min. Break
17:30 - 19:00	<p>Session 4 Session Chair: Dr. Anastasios Tsolakidis</p> <p><i>Juliano Sales, Katerina Tzafilkou, Adamantios Koumpis, Thomas Gees, Heinrich Zimmermann, Nikolaos Protogeros and Siegfried Handschuh</i></p> <p>#4: Let the end user in peace: usability and user experience aspects related to the design of tutoring systems (Po)</p> <p><i>Chia-Ling Tsai, Yong-Guei Lin, Ming-Chi Liu and Wei-Yang Lin</i></p> <p>#17: Computer-Aided Grouping of Students with Reading Disabilities for Effective Response-to-Intervention (Po)</p> <p><i>Dariusz Mikulowski and Jolanta Brzostek-Pawlowska</i></p> <p>#1: Multi-Sensual Augmented Reality in Interactive Accessible Math Tutoring System for Flipped Classroom (FP)</p> <p><i>Theodoros Anagnostopoulos, Christos Kytagias, Theodoros Xanthopoulos, Ioannis Georgakopoulos, Ioannis Salmon and Yannis Psaromiligkos</i></p> <p>#27: Intelligent Predictive Analytics for Identifying Students at Risk of Failure in Moodle Courses (FP)</p>
19:00	End of Session

ITS 2020 Program ♦ Conference ♦ **Thursday June 11, 2020** ♦

10:00

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11:40

Session 5

Session Chair: **Dr. Michalis Feidakis**

Thierry Geoffre and Lionel Alvarez

#2: Adaptive Learning to Support Reading Skills Development for All : A Single-Case Experimental Design to Monitor, Describe, and Assess the Impact of Adaptive Learning on Language Development of a Diversity of K-12 Pupils (SP)

Nikolaj Troels Graf von Malotky and Alke Martens

#3: General ITS software architecture, framework and prototype (SP)

Ralf Klamma, Peter de Lange, Alexander Neumann, Milos Kravcik, Xia Wang, Jakub Kuzilek and Benedikt Hensen

#10: Scaling Mentoring Support with Distributed Artificial Intelligence (SP)

Wafa Bel Hadj Ammar

#57: Recommender System for quality educational resources (SP)

Pedro Bispo Santos, Caroline Verena Bhowmik and Iryna Gurevych

#20: Avoiding Bias in Students' Intrinsic Motivation Detection (SP)

30 min. Break

12:15

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13:50

Session 6

Session Chair: **Dr. Christos Troussas**

Achilles Dougalis and Dimitris Plexousakis

#48: AFFLOG: A Logic Based Affective Tutoring System (Po)

Konstantinos Chytas, Anastasios Tsolakidis and Christos Skourlas

#49: Towards a Framework for Learning Systems in Smart Universities (Po)

Agoritsa Gogoulou

#50: Interweaving activities, feedback and learner model in a learner centered learning environment (Po)

Huda Alrashidi, Thomas Daniel Ullmann, Mike Joy and Nouf Almujaally

#55: The Educators' Perspective on Developing a Reflective Writing Framework (RWF) for Assessing Reflective Writing in Computer Science Education (Po)

Huda Alrashidi, Thomas Daniel Ullmann, Mike Joy and Nouf Almujaally

#56: Validating the Reflective Writing Framework (RWF) for Assessing Reflective Writing in Computer Science Education (Po)

Akrivi Krouska, Christos Troussas and Cleo Sgouropoulou

#38: Applying genetic algorithms for recommending adequate competitors in mobile game-based learning environments (SP)

30 min. Break

<p>14:20 - 16:15</p>	<p><u>Session 7</u> Session Chair: Dr. Filippos Giannakas</p> <p><i>Ana Carla Holanda, Patricia C. A. R. Tedesco, Elaine H. T. Oliveira and Tancicleide C. S. Gomes</i> #24: MOOCOLAB - A customized collaboration framework in MOOCS (Massive Open Online Courses) (SP)</p> <p><i>Duy Bui, Jung Hee Kim and Michael Glass</i> #64: Dialogue Act Pairs for Automated Analysis of Typed-Chat Group Problem-Solving (Po)</p> <p><i>Amruth Kumar</i> #65: Long Term Retention of Programming Concepts Learned Using Software Tutors (SP)</p> <p><i>Alexie Byrns, Hamdi Ben Abdessalem, Marc Cuesta, Marie-Andrée Bruneau, Sylvie Belleville and Claude Frasson</i> #40: Adaptive Music Therapy for Alzheimer's Disease using Virtual Reality (SP)</p> <p><i>M. Kumar Jha, M. Boukadida, H. Ben Abdessalem, A. Byrns, M. Cuesta, MA. Bruneau, S. Belleville and C. Frasson</i> #41: Improving Cognitive and Emotional State Using 3D Virtual Reality Orientation Game (SP)</p> <p><i>Wellton Costa de Oliveira and Andrey Ricardo Pimentel</i> #15: Changes of Affective States in Intelligent Tutoring System to Improve Feedbacks Through Low-cost and Open Electroencephalogram and Facial Expression (SP)</p>
<p>30 min. Break</p>	
<p>16:45 - 18:45</p>	<p><u>Session 8</u> Session Chair: Dr. Filippos Giannakas</p> <p><i>David Boulanger and Vivekanandan Kumar</i> #18: SHAPed Automated Essay Scoring: Explaining Writing Features' Contributions to English Writing Organization (FP)</p>

Maria-Dorinela Dascalu, Mihai Dascalu, Stefan Ruseti, Mihai Carabas, Stefan Trausan-Matu and Danielle McNamara

#31: Cohesion Network Analysis: Predicting Course Grades and Generating Sociograms for a Romanian Moodle Course (FP)

Khaled Halimi and Hassina Seridi

#53: Where the competency-based assessment meets the semantic learning analytics (FP)

George Chatzimichalis and Andreas Papasalouros

#54: Towards CSCL Scripting By Example (FP)

End of Session

ITS 2020 Program ♦ Conference ♦ **Friday June 12, 2020** ♦

10:00

Session 9

Session Chair: **Dr. Akrivi Krouska**

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12:30

Ioannis Drivas, Georgios Giannakopoulos and Damianos Sakas

#73: Learning Analytics in Big Data Era. A Novel Method for Exploration, Validation & Predictive Model Development (Po)

George Meletiou, Cleo Sgouropoulou and Christos Skourlas

#76: Quality Assurance in Higher Education: The role of students (Po)

Laurentiu-Marian Neagu, Eric Rigaud, Sebastien Travadel, Mihai Dascalu and Razvan Rughinis

#58: Intelligent Tutoring Systems for Psychomotor Training – A Systematic Literature Review (SP)

Sonia Palha, Anders Bouwer, Bert Bredeweg and Siard Keulen

#61: Self-construction and interactive animations to support the learning of drawing graphs and reasoning in mathematics (SP)

Konstantinos Malliaridis, Stefanos Ougiaroglou and Dimitris Dervos

#62: WebApriori: A web application for association rules mining (SP)

Christos Troussas, Akrivi Krouska and Cleo Sgouropoulou

#39: Dynamic detection of learning modalities using fuzzy logic in students' interaction activities (SP)

Nouf Almujaally and Mike Joy

#66: Towards a Template-Driven Approach to Documenting Teaching Practices (Po)

Nouf Almujaally and Mike Joy

#69: A Knowledge Sharing System Architecture for Higher Education Institutions (SP)

	30 min. Break
13:00 – 14:15	<p><u>Session 10</u> Session Chair: Dr. Christos Troussas</p> <p><i>Damien Fleur, Wouter van den Bos and Bert Bredeweg</i></p> <p>#74: Learning Analytics Dashboard for Motivation and Performance (SP)</p> <p><i>Bogdan Vajdea, Aurelia Ciupe, Bogdan Orza and Serban Meza</i></p> <p>#75: Educational Driving through Intelligent Traffic Simulation (SP)</p> <p><i>Geng Sun</i></p> <p>#80: Evolutionary Learner Profile Optimization using Rare and Negative Association Rules for Micro Open Learning (SP)</p> <p><i>Reva Freedman, Ben Kluga, Dean Labarbera, Zachary Hueneke and Virginia Naples</i></p> <p>#70: Reducing Cognitive Load for Anatomy Students with a Multimodal ITS Platform (Po)</p>
	30 min. Break
14:45 - 18:15	<p><u>Session 11</u> Session Chair: Dr. Maria Tzelepi</p> <p><i>Ahmed Alamri, Zhongtian Sun, Alexandra Cristea, Gautham Senthilnathan, Craig Stewart and Shi Lei</i></p> <p>#60: Is MOOC Learning Different from Dropout Learners? A visually-driven, multi-granularity approach (FP)</p>

	<p><i>Avraam Chatzopoulos, Michail Papoutsidakis, Michail Kalogiannakis and Sarantos Psycharis</i></p> <p>#21: Innovative Robot for Educational Robotics and STEM (FP)</p> <p><i>Gabriel Badea and Elvira Popescu</i></p> <p>#22: Supporting Students by Integrating an Open Learner Model in a Peer Assessment Platform (FP)</p> <p><i>Martin Sandberg, Johannes Rehm, Matej Mnoucek, Odd Erik Gundersen and Irina Reshodko</i></p> <p>#23: Explaining Traffic Situations – Architecture of a Virtual Driving Instructor (FP)</p> <p><i>Jean-Philippe Corbeil, Michel Gagnon and Philippe R. Richard</i></p> <p>#19: Probabilistic Approaches to Detect Blocking States in Intelligent Tutoring System (FP)</p> <p><i>Lei Shi, Alexandra Cristea, Armando Maciel Toda and Wilk Oliveira</i></p> <p>#11: Exploring Navigation Styles in a FutureLearn MOOC (FP)</p> <p><i>Tianshu Li, Imène Jraidi, Alejandra Ruiz Segura, Leo Holton and Susanne Lajoie</i></p> <p>#8: Developing a Multimodal Affect Assessment for Aviation Training (FP)</p>
18:15-18:55	<p><i>Eva Angelopoulou, Dimitris Koutsanastasis - Data & AI Specialists Microsoft Greece, Cyprus & Malta</i></p> <p>Microsoft AI in Education (Presentation)</p>
18:55-19:20	<p>Closing Statements, Best Paper Awards</p> <p>End of Conference</p>