

International

2nd International Conference on Human Interaction and Emerging Technologies: Future Applications

Final Program

April 23-25, 2020

Centre Hospitalier Universitaire Vaudois (CHUV)
Lausanne, Switzerland



Opening and Keynote Address

Thursday, April 23, 2020 at 13:30-15:00 Amphitheatre (Level 1), Centre Hospitalier Universitaire Vaudois (CHUV) Address: Centre Hospitalier Universitaire Vaudois (CHUV) Rue du Bugnon 46, 1005 Lausanne, Switzerland

Keynote Address

Thursday, April 23, 2020 at 13:30-15:00

Title:

Real World Movement Analysis in Sport and Medicine Using Wearable Technologies



Speaker:

Prof. Kamiar Aminian, Ecole Polytechnique Federale de Lausanne, Switzerland

Conference Reception/Banquet

THURSDAY, APRIL 23, 2020 AT 18:30-22:00

(Dress is business casual, Registered Participants, Photo ID Required)

18:30 - 22:00 - CONFERENCE RECEPTION THE OLYMPIC MUSEUM IN LAUSANNE- LE MUSÉE OLYMPIQUE. RECEPTION ADDRESS: QUAI D'OUCHY 1, 1006 LAUSANNE, SUISSE



CONFERENCE TRACK CHAIRS

Vincent Gremeaux-Bader (Switzerland) Redha Taiar (France), Kamiar Aminian (Switzerland)

International Scientific Advisory Board

S. Alessandro, Italy K. Alex, Russia C. Ana, Brazil M. Andujar, USA N. Antonova, Bulgaria M. Bernardo Filho, Brazil F. Bogard, France S. Borja, Spain C. Carelli, USA

J. Cegarra, France M. Christiano, Brazil

F. Constant Boyer, France

D. Danúbia, Brazil A. Ebert, Germany

V. Eddy, TheNetherlands

A. Ellie, USA

F. Fourchet, Switzerland

C. Falcao, Brazil M. Friedrich, Germany R. Gaëtan, France C. Hansen, Germany

R. Heimgärtner, Germany J. Jeong, SouthKorea

R. Joern, Germany A. Kuchumov, Russia

P. Laisa, Brazil J. Laskin, USA C. Machado, Brazil

S. MacKinnon, Sweden

D. DaCunhadeSá-Caputo, Brazil V. Marieke, TheNetherlands R. Taiar, France Ł. Matuszela Ski, PolandD. Middleton, SaudiArabiaD. Thiveaud, FranceA. Vanessa, Brazil

B. Mirkin, Russia

B. Molik, Poland A. Nadia, Bulgaria

S. Nanayakkara, New Zealand

S. Parida, Germany M. Pavlovic, Italy

A. Nagano, Japan

J. Pierret, France H. Pillet, France

J. Rouillard, France

F. Sandnes, Norway J. Seigneur, Switzerland

J. Stefan, USA E. Suhir, USA

D. Thiveaud, France

R. Whiteley, Qatar

W. Woo, SouthKorea

K. Zerka, Poland



REGISTRATION DESK OPEN:

Thursday, April 23	10:00 -13:00
Friday, April 24	8:30-14:00
Saturday, April 25	8:30-14:00

Friday, April 24

#	TITLE	Room	TRACK		
	Session Time: 9:00 - 11:00				
1	IHIET 1: Augmented Human Research: Applications in Sport and Medicine	Zürich	IHIET 1		
2	IHIET 2: Human-centered Design I	Geneva	IHIET 2		
3	IHIET 3: Artificial Intelligence and Computing I	Bern	IHIET 3		
4	IHIET 4: Augmented, Virtual and Mixed Reality Simulation	Basel	IHIET 4		
11:00 - 11:30 • Coffee Break - Refreshments will be provided					
Session Time: 11:30 -13:30					
5	IHIET 6: Human–computer Interaction I	Zürich	IHIET 6		
6	IHIET 7: Healthcare and Medical Applications I	Geneva	IHIET 7		
7	IHIET 9: Human-Technology and Future of Work I	Bern	IHIET 9		
8	IHIET 10: Emerging Technologies I	Basel	IHIET 10		
13:30 - 14:30 • Lunch Break					
	Session Time: 14:30 -16:30				
9	IHIET 11: Management, Training and Business Applications I	Zürich	IHIET 11		
10	IHIET 2: Human-centered Design II	Geneva	IHIET 2		
11	IHIET 3: Artificial Intelligence and Computing II	Bern	IHIET 3		
12	IHIET 6: Human–computer Interaction II	Basel	IHIET 6		
	16:30 - 17:00 • Coffee Break - Refreshments will be provided				

Conference

Saturday, April 25

#	TITLE	Room	TRACK		
	Session Time: 9:00 - 11:00				
13	IHIET 7: Healthcare and Medical Applications II	Zürich	IHIET 7		
14	IHIET 9: Human-Technology and Future of Work II	Geneva	IHIET 9		
16	IHIET 11: Management, Training and Business Applications II	Basel	IHIET 11		
	11:00 - 11:30 • Coffee Break - Refreshments will be provided				
Session Time: 11:30 - 13:30					
20	IHIET 7: Healthcare and Medical Applications III	Zürich	IHIET 7		
	13:30 - 14:30 • Lunch Break				
	Session Time: 14:30 -16:30				
22	IHIET 11: Management, Training and Business Applications III	Bern	IHIET 11		

ACRONYM	Ткаск
IHIET 1	Augmented Human Research: Applications in Sport and Medicine
IHIET 2	Human-centered Design
IHIET 3	Artificial Intelligence and Computing
IHIET 4	Augmented, Virtual and Mixed Reality Simulation
IHIET 5	Wearable Technologies Applications in sport, Health, Disease and Rehabilitation
IHIET 6	Human–computer Interaction
IHIET 7	Healthcare and Medical Applications
IHIET 8	Sports Medicine, Biomechanics and Fitness Technology
IHIET 9	Human-Technology and Future of Work
IHIET 10	Emerging Technologies
IHIET 11	Management, Training and Business Applications

1 IHIET 1: Augmented Human Research: Applications in Sport and Medicine Session Chair(s): Alvaro Taveira, USA and Kristyna Rusnakova, Czech Republic

Quasi-Experimental Study of Exertion, Recovery, and Work Perceptions Related to Passive Upper-Body EXO Use During Overhead Low Force Work

Christine Daratany, Alvaro Taveira, United States

Effect of cognitive load with baby crying on postural stability in air force

Kristyna Rusnakova, Miloslav Štehlik, Jitka Soumarova, Cestmir Oberman, Czech Republic

Spontaneous physical activity and sedentary patterns analyzed in a general population by the eMouve application

Sylvie Rousset, Deborah Coyault-Abele, Maelane Benoit, Rihab Zemni, Philippe Lacomme, Gérard Fleury, France

Human Factors in Interfaces for Rehabilitation-Assistive Exoskeletons: A Critical Review and Research Agenda

Davide Giusino, Federico Fraboni, Giuseppe Rainieri, Marco De Angelis, Annagrazia Tria, Laura Maria Alessandra La Bara, Luca Pietrantoni, Italy

FEEDI - A Smart Wearable Foot-band for Navigation and Guidance using Haptic Feedback

Simon Stock, Alain Bertemes, Marco Stang, Martin Boehme, Daniel Grimm, Wilhelm Stork, Germany

The factors impacting the adoption of mobile health applications using the analytic hierarchical process method

Haseena Al Katheeri, United Arab Emirates

2 IHIET 2: Human-centered Design I

Session Chair(s): Amangul Imanghaliyeva, UK and Evangelos Markopoulos, UK

An AcciMap of the Edinburgh Tram Network Project Delivery Failure Amangul Imanghaliyeva, United Kingdom

Workload and Visual Scanning Techniques of Expert and Novice Helicopter Pilots during Simulated Flight in open sea

Giuseppe Rainieri, Federico Fraboni, Martin Tušl, Gabriele Russo, Davide Giusino, Marco De Angelis, Annagrazia Tria, Luca Pietrantoni, Italy

Kansei Design and its applications in Architecture and the Built Environment Paolo Caratelli, Maria Alessandra Misuri, United Arab Emirates

A Critical Analysis of Music Recommendation Systems and New Perspectives.

Dushani Perera, Maneesha Rajaratne, Buddy Liyanage, Kasun Karunanayake,
Shiromi Arunathilake, Sri Lanka

Design of human-centred technical systems, products and human capital development

Evgeny Kolbachev, Elena Sidorova, Polina Vaneeva, Russia

Virtual Reality and the Architectural Evaluation Process

Christianne Falcão, Breno Carvalho, Susanna Lima, Brenda Calife, Brazil

Avoiding Post-Merger Corporate Downsize Restructuring: The Democratic Employee-Culture Fit Model (DeECFit)

Evangelos Markopoulos, Ines Selma Kirane, Emma Luisa Gann, Hannu Vanharanta, United Kingdom

3 IHIET 3: Artificial Intelligence and Computing I

Session Chair(s): Tiffany D'Souza, USA and Luepol Pipanmekaporn, Thailand

Solving the Revolving Door Problem: Machine Learning for Readmission Risk Assessment

Alexander Mitts, Tiffany D'Souza, Bryan Sadler, Dominick Battistini, David Vuong, Andre Vlasov, United States

Deep Learning Approach for Fishing Vessel Classification from VMS Trajectories using Recurrent Neural Networks

Luepol Pipanmekaporn, Suwatchai Kamonsantiroj, Thailand

Can machine be intelligent? The new concept of intelligent machine Vaclav Jirovsky, Vaclav Jirovsky Jn, Czech Republic

Calculation and visualization of the speed of movement of the working point of the exploratory research process

Olga Popova, Boris Popov, Vladimir Afanasyev, Vladimir Karandey, Russia Continuous control in deep reinforcement learning with direct policy derivation from Q network

Aydar Akhmetzyanov, Alexandr Klimchik, Rauf Yagfarov, Mikhail Ostanin, Salimzhan Gafurov, Russia

Development of Web Application in English Subject

Busarin Eamthanakul, Orrawan Rewthong, Sansanee Sansiribhan, Thailand

4 IHIET 4: Augmented, Virtual and Mixed Reality Simulation

Session Chair(s): Francesco Carrino, Switzerland and Petr Svoboda, Czech Republic

PersonAge VR – A Virtual Reality story-telling tool to raise awareness about ageism Francesco Carrino, Valentin Moullet, Omar Abou Khaled, Elena Mugellini, Christian Maggiori, Switzerland

Early-detection and Treatment of Torticollis in Infants using Augmented RealityD. Michael Franklin, Kimberly Castle, Rachael Walton-Mouw, United States

3D multi-user virtual environments in education

Petr Svoboda, Czech Republic

Evaluating Visual Perception by Tracking Eye Movement in Architectural Space during Virtual Reality Experiences

Nayeon Kim, Hyunsoo Lee, South Korea

Using Virtual Reality and Gamification for a Restorative Therapy and Rehabilitation Support Equipment

Luís Castro Soares, César Páris, Anabela Gomes, Jorge Laíns, Filipe Carvalho, Luís Roseiro, Portugal

Development of a virtual reality based fire training simulator and machine learning based path guidance system: A case of hospital fire breakouts

Jhareswar Maiti, Krantiraditya Dhalmahapatra, Saransh Gupta, Udayaditya Singh, India

11:00 - 11:30 • Coffee Break - Refreshments will be provided

IHIET 6: Human-computer Interaction I

Session Chair(s): Jean-Francois Lapointe, Canada and Yeslam Al-Saggaf, Australia

A Distributed Multimodal Multi-User Virtual Environment for Visualization and Query of Complex Data

Jean-François Lapointe, Julio Valdés, Luc Belliveau, Norman G. Vinson, Bruno Emond, Serge Léger, Canada

Reduce stress through empathic machine to improve HCI

Karl Daher, Mathias Fuchs, Elena Mugellini, Denis Lalanne, Omar Abou Khaled, Switzerland

App Use While Phubbing

5

11:30 -13:30 - ZÜRICH

Yeslam Al-Saggaf, Australia

Individual 'Trace' in Knowledge Space A novel design approach for humansystems interaction

Damian Chapman, Stephen Wang, United Kingdom

Optimization for Collaborative Learning Environments by Matching Team Members with Analyzing Students' Various Data Using ICT Keiko Tsujioka, Japan

6 IHIET 7: Healthcare and Medical Applications I

Session Chair(s): Peter Forbrig, Germany and Rudolf Fischer, Germany

Supporting the Arm-Ability Training of Stroke Patients by a Social-Humanoid Robot

Peter Forbrig, Thomas Platz, Germany

Service Innovation in Health Care - The role of Health Platforms as Innovators Rudolf Fischer, Germany

Innovation and technology in one new hospital in Montreal: a lived experience of healthcare professionals

Zakia Hammouni, Canada

HypnOS: A Sleep Monitoring and Recommendation System to Improve Sleep Hygiene in Intelligent Homes

Eleni Tsolakou, Asterios Leonidis, Vasilios Kouroumalis, Maria Korozi, Margherita Antona, Constantine Stephanidis, Greece

Healthcare devices for children: strategies to improve user experience Laura Giraldi, Marta Maini, Francesca Morelli, Italy

Mathematical modelling and computer analysis of diabetes to develop novel index for diagnosis and risk prediction of pathogenesis

Kazumi Ōmata, Japan

11:30 -13:30 - BERN

7 IHIET 9: Human-Technology and Future of Work I

Session Chair(s): Deborah Middleton, Saudi Arabia and Fernando Galdon, UK

Information Management Strategies in Manual Assembly

Sven Hinrichsen, Benjamin Adrian, Manfred Bornewasser, Germany

Designing trust in Artificial Intelligence: A comparative study among specifications, principles and levels of control.

Fernando Galdon, Ashley Hall, Laura Ferrarello, United Kingdom

Reduction of Cognitive Load in Complex Assembly Systems

Dominic Bläsing, Sven Hinrichsen, Manfred Bornewasser, Germany

How can we rescue the user from the Digital Transformation tornado? Stefano Rizzo, Italy

Advancing modular green roof and wall system design thinking using 3D and 2D visualization modalities by small groups in action learning projects.

Deborah Middleton, Saudi Arabia

Work-compatibility based Accident Prediction Model for the Workforce of an Underground Coal Mine in India

Suprakash Gupta, Arra Kumar, Gunda Yuga Raju, India

8 IHIET 10: Emerging Technologies I

Session Chair(s): Yeslam Al-Saggaf, Australia and Nicolay Vasilyev, Russia

Expression of feelings in Twitter: A decision tree approach

Yeslam Al-Saggaf, Australia

Artificial Intelligence as Answer to Cognitive Revolution Challenges Nicolay Vasilyev, Vladimir Gromyko, Stanislav Anosov, Russia

Human-Connected Object Interaction: Applications for Citizens with Special Needs Hana Aljaberi, Mohammad Amin Kuhail, Fatima Al-Harbi and Ahmed Seffah, United Arab Emirates

Reflection on the Adoption of a Virtual Reality Adaptive Learning Tool for Railway and Process Industry Training

Alberto Martinetti, Micaela Demichela, Steven Spoolder, Joep von Berg, Leo van Dongen, The Netherlands

The right to reparations: a new digital right for repairing trust in the emerging era of highly autonomous systems

Fernando Galdon, Ashley Hall, United Kingdom

Dual-axis Force Sensor with Passive Eddy Current Damper for Precision Measurement

Xiantao Sun, Wenjie Chen, Weihai Chen, Cungang Hu, China

13:30 - 14:30 • Lunch Break

9 IHIET 11: Management, Training and Business Applications I Session Chair(s): Maurizio Caon, Switzerland and Carlos Raymundo, Peru

Digitalization of the Last Mile of a Humanitarian Supply Chain Maurizio Caon, Omar Abou Khaled, Paul Vaucher, Switzerland

Production Management Model For Reducing Product Development Waiting Time By Applying Lean Manufacturing Model For SME Exporters In The Textile Sector

Carlos Raymundo, Gianpierre Zapata, Katerine Becerra, Xiomara Carbajal, Peru

Service Model Under The Lean and Change Management Approaches To Reduce Delivery Times and Optimize The Quality Of Processes In A Company In The Metal-Mechanic Sector

Carlos Raymundo, Tom Orihuela, Juan Peñafiel, Peru

Occupational Health and Safety Management Model for Mining Contracts Yakelin Cano, Grimaldo Quispe, Heyul Chavez, Nestor Mamani-Macedo, Carlos Raymundo, Francisco Dominguez, Peru

Comprehensive Strategic Risk Management System to Reduce Evaluation Times in Small-Scale Mining Projects

Carlos Raymundo, Fernando Loarte-Flores, Yaneth Vasquez-Olivera, Peru Tennis Sports Organization and Service for Middle-aged and Old People in Wuhan City of China

Chongyang Zhang, Qi Luo, China

4:30 -16:30 - ZÜRICH

	Friday, April 24
10	IHIET 2: Human-centered Design II Session Chair(s): Pertti Saariluoma, Finland and Kevin Clark, USA
14:30 -16:30 - GENEVA	Hume's guillotine in designing ethically intelligent technologies Pertti Saariluoma, Finland Designing Presence Kevin Clark, Kazuhiko Yamazaki, United States A Democratic, Green Ocean Management Framework for Environmental, Social and Governance (ESG) Compliance Evangelos Markopoulos, Ines Selma Kirane, Emma Luisa Gann, Hannu Vanharanta, United Kingdom Interview Survey Method to Extract Cultural Trait Applicable to Concept Design Uulen Tumurkhaduur, kazuhiko yamazaki, Japan Proposal for the Three Experiences: User Experience, Employee Experience and Social Experience Kazuhiko Yamazaki, Kevin Clark, Japan Analysis of the work system in an object of the new media and the effects generated in the processes of interaction with a user Lorena Olmos Pineda, Jorge Gil Tejeda, Mexico
11	IHIET 3: Artificial Intelligence and Computing II Session Chair(s): Amangul Imanghaliyeva, UK and Iman Al-dahhan Al-dahhan, Iraq
14:30 -16:30 - BERN	Research on Cooperative Operation of Air Combat based on Multi-Agent Jianqiang Zheng, Qinghua Ma, Shujun Yang, Shuaiwei Wang, Yiming Liang, Jirong Ma, China Forecasting by using the optimal time series method Iman Amer Hameed Dahhan, Marwan Ashour, Areej Hassan, Iraq An AcciMap for the Kleen Energy Power Plant Project Accident Amangul Imanghaliyeva, United Kingdom Traffic Sign Classification Using Embedding Learning Approach for Self-Driving Cars Rauf Yagfarov, Vladislav Ostankovich, Aydar Akhmetzyanov, Russia Emergency Case Report Application Applying Location Based Service Framework on Mobile Smart Devices Shutchapol Chopvitayakun, Thailand Mapping of mangrove change with remote sensing in Samut Songkhram Province, Thailand Walaiporn phonphan, Thailand Species Diversity and Abundance of Birds in Salt field Areas, Shrimp farm Areas and Rice field Areas for Ecotourism in Thailand Nitinarth Charoenpokaraj, Walaiporn phonphan, Wisoot Nuamsiri, Thailand Smart Textile for Architecture - Living with technology Ana Claudia Figueiredo De Oliveira, Portugal
12	IHIET 6: Human–computer Interaction II Session Chair(s): Dev Raj Lamichhane, UK and Valentina Milenkova, Bulgaria
14:30 -16:30 - BASEL	Make me Messenger: Critiquing Children as Design Informants Dev Lamichhane, Janet Read, United Kingdom Shaping Digital Literacy in knowledge society Valentina Milenkova, Boris Manov, Bulgaria MOOC as an Innovative Tool for Design Teaching Rosa Luna, Marco Neves, Portugal Analysis of the work system in an object of the new media and the effects generated in the processes of interaction with a weak - visual person Jorge Gil Tejeda, Lorena Olmos Pineda, Mexico Machine's Statistical Parsing and Human's Cognitive Preference for Garden Path Sentences Jiali Du, Pingfang Yu, Xinguang Li, China Comparative Research on Terminology Databases in Europe and China Jiali Du, Christina Alexandris, Pingfang Yu, China Icon Design Recommendations for Central Consoles of Intelligent Vehicles Fang You, Yi-Fan Yang, Mengting Fu, Jifang Wang, Xiaojun Luo, Liping Li, Preben Hansen, Jianmin Wang, China
	16:30 - 17:00 • Coffee Break - Refreshments will be provided

9:00 - 11:00 - ZÜRICH

9:00 - 11:00 - GENEVA

13 IHIET 7: Healthcare and Medical Applications II

Session Chair(s): Ying-Chieh Liu, Taiwan and Irina Kurnikova, Russia

Development of User-Drawn Doodles for Communication and Reporting of Dietary Intake in Health Management

Ying-Chieh Liu, Chien-Hung Chen, Su-Ju Lu, Yu-Sheng Lin, Hsin-Yun Chen, Taiwan

Quantitative Methods for Assessing Functional Reserves in Predicting the Effectiveness of Medical Rehabilitation of Patients with Diabetes

Irina Kurnikova, Ramchandra Sargar, Svetlana Kislaya, Sofia Buturlina, Ekaterina Mukhametgaleeva, Russia

Evaluation of Gérontechnologies: support to decision making & prescriptionAissaoui Djamel, Javier Barcenilla, Switzerland

Increase food safety - Probiotic Lactic Acid Bacteria Isolation from Fermented Beef (Naem) Samples for Use as Starter Culture

Jaruwan Chutrtong, Thailand

Effects of the Physical Therapy Application for Elderly

Kunyanuth Kularbphettong, Sililux Katesiri, Thailand

The human interface interaction design based on blood oxygen meter Yi Zhang, China

IHIET 9: Human-Technology and Future of Work II

14 Session Chair(s): Evangelos Markopoulos, United Kingdom and Fernando Galdon, UK

Synthetic Consequential Reasoning: Facilitating the design of synthetic morality in highly automated systems via a multidimensional-scalar framework

Fernando Galdon, Ashley Hall, United Kingdom

Green Capitalism: Democratizing Sustainable Innovation by Recycling Intellectual Capital Energy

Evangelos Markopoulos, Emma Luisa Gann, Ines Selma Kirane, Hannu Vanharanta, United Kingdom

Rapid Imaging of Latent Fingerprints using Xanthone compounds on Ultra-Violet silica Nano particles

Chanyapat Sangsuwon, Thailand

Muscle Fatigue Monitoring: Using HD-sEMG Techniques

Xiangyu Liu, Meiyu Zhou, China

An Investigation of Chinese Driving Behavior from Driver's Perspective Long Liu, Jue Li, Daniel Sällberg, China

16 IHIET 11: Management, Training and Business Applications II

Session Chair(s): Kanyarat bussaban, Thailand and Carlos Raymundo, Peru

Lean Healthcare Model Using Knowledge Management and Change Management Approaches To Reduce Delays For Care In The Health Sector

Carlos Raymundo, Alvaro Maravi-Cardenas, Miguel Fuentes-Chahuaylla, Juan Peñafiel, Peru

An analytical study of aptitude tests for entrance to architecture education: a case study of India

Poonam Khan, Nikhil Mandal, India

An Application of Social Network Analysis to Study Interconnection of Courses in Mathematics Education Curriculum

Kanyarat bussaban, Thailand

Lean Six Sigma Operational Assessment Method with a Modified DMA-IC Cycle for Reducing Non-Productive Times at Mining SMEs

Fabricio Aguero, Gianfranco Ramírez, Vidal Aramburu, Nestor Mamani-Macedo, Carlos Raymundo, Francisco Dominguez, Peru

Construction of Law Network Courses in Higher Vocational Colleges Lili Li, China

11:00 - 11:30 • Coffee Break - Refreshments will be provided

20 IHIET 7: Healthcare and Medical Applications III

Session Chair(s): Alan Liu, USA and Djamel Aissaoui, Switzerland

The Wide Area Virtual Environment - A Novel Immersive Environment for Medical Team Training

Alan Liu, Eric Acosta, Jamie Cope, Valerie Henry, Fernando Reyes, Joseph Bradascio, Wesley Meek, United States

Properties of Emulsion Sausage with Partial Replacement of Fat by Dragon Fruit Peel Powder

Nuntaporn Aukkanit, Siriyakorn Sroyraya, Tamonwan Duljumnong, Thailand

The assessment of EIQ (Environment Impact Quotient) Field Use Rating from the rate of pesticides in paddy, Bang Rachan District, Sing Buri province

Talisa Niemmanee, Thailand

11:30 - 13:30 - ZÜRICH

14:30 - 16:30 - BERN

Breath acetone sensor with bio-fluorometry for early screening of diabetes mellitus

Kohji Mitsubayashi, Koji Toma, Takahiro Arakawa, Japan

Evaluation of Gérontechnologies: Support to Decision Making & PrescriptionAissaoui Djamel, Switzerland

13:30 - 14:30 • Lunch Break

22 IHIET 11: Management, Training and Business Applications III

Session Chair(s): Christian Iberico, Peru and Yuler Montalvo, Peru

Management Projects Model To Reduce Lead Time Of Base Station Telecom Construction In SME Based On Lean Focus and Agility

Carlos Raymundo, Christian Iberico, Ricardo Sun-Itozu, Maribel Perez-Paredes, Peru

Public management model with a sustainable development approach based on Lean Six Sigma: Formalization of small-scale and artisanal mining in Peru

Yuler Montalvo, Vidal Aramburu, Nestor Mamani-Macedo, Carlos Raymundo, Francisco Dominguez, Peru

Drilling-and-Blasting Mesh Design For Underground Mining Using The Holmberg Method

Max Poma, Grimaldo Quispe, Nestor Mamani-Macedo, Gianpierre Zapata, Carlos Raymundo, Francisco Dominguez, Peru

Safety Management Model with a Behavior-Based Safety Coaching Approach to Reduce Substandard Behaviors in the Mining Sector

Brahayan Gómez, Roberto Sánchez, Yaneth Vasquez-Olivera, Nestor Mamani-Macedo, Carlos Raymundo, Francisco Dominguez, Peru

Design and Implementation of Online Law Consultation System in Higher Vocational Colleges

Lili Li, China

16:30 - 17:00 • Coffee Break - Refreshments will be provided



Posters will be displayed Friday, April 24, 2020 and Saturday, April 25, 2020. Posters must be removed by the end of each day/session they are scheduled to be demonstrated. Posters can be positioned starting on Friday, April 24, 2020 8:00 a.m. and removed by the last poster session on Saturday, April 25, 202, after 16:30. Poster demonstration sessions will be at the times shown below.

POSTER/DEMONSTRATION SESSIONS FRIDAY, APRIL 24

Session Time: 10:30 - 13:30

Room: Foyer

Early Detection of Foodborne Illnesses in Social Media A1.

Jacky Casas, Elena Mugellini, Omar Abou Khaled, Switzerland

Study on Software Log Anomaly Detection System with Unsupervised A2. Learning Algorithm

Rin Hirakawa, Yoshihisa Nakatoh, Keitaro Tominaga, Japan

Training in immersive virtual reality: A short review of presumptions and АЗ. the contextual interference effect

> Cyrill Ziegler, Andreas Papageorgiou, Mathias Hirschi, Rosina Genovese, Oliver Christ, Switzerland

Surgical Recommendations for Epilepsy: A Machine Learning Tool

Tiffany Dsouza, Caio Marconato Matias, Lohit Velagapudi, Alexander Mitts, Bryan Sadler, David Vuong, Dominick Battistini, United States

Parametric Hospital A5.

Leonardo Dias, Brazil

Monitoring of sweat parameters and biomarkers for the development of a A6. multisensing cognitive wearable sensor: the WeCare project

Lafaye Céline, Saubade Mathieu, Switzerland

Limitations on learning through technology A7.

Enrique Garcia Vazquez, Miguel Angel Cruz Dominguez, Abelardo Rivera Corsi, Mexico

Identifying High Performance Indicators for Close Combat Forces in a A8. Military Training Environment

Rory O'Brien, Kenneth Pitts, Jay Brimstin, United States

Intent Inference of Driver's Deceleration Behavior Using Unscented A9. Kalman Filter Integrated with Conventional Artificial Neural Network Model

Hironori Suzuki, Sho Wakabayashi, Japan



POSTER/DEMONSTRATION SESSIONS FRIDAY, APRIL 24

Session Time: 14:30 - 16:30

Room: Foyer

B1. Symbols and Functions in Human Machine Interface: Are Google Icons a Possible Solution for Intercultural Usability

Andreas Papageorgiou, Kamalatharsi Mutuura, Oliver Christ, Switzerland

B2. Validation of driving simulation in a virtual reality setting: the effects of age, sex and simulation technology on driving behavior

Kaspar Kaufmann, Simon Wehrli, Emanuel Mistretta, Stefan Arisona, Simon Schubiger, Thomas Wyssenbach, Oliver Christ, Switzerland

B3. Effectiveness and durability of Silver-based Antimicrobial textiles in the healthcare environment

Daniela Rondinone, Kavita Mathur, Blanton Godfrey, Martin King, United States

B4. Identification and evaluation of human error by H-FMEA technique in overhead cranes operators of a Steel Industry in Khuzestan

Behnoush Jafari, zeynab sadat nezamodini, Arman amiri, Hanan Sari, Seyd Amin Jazayeri, Iran

B5. The use of modern ICT to ensure students' self-realization in learning communications of the university

Elena Shutenko, Russia

B6. Educating through social networks

Selene Margarita Vazquez Soto, Abelardo Rivera Corsi, Gerardo Jesùs Carabes Real, Mexico

B7. **Profiles of professional drivers based on drowsiness and distraction alerts**Sónia Soares, Zafeiris Kokkinogenis, Sara Ferreira, António Couto, Portugal

POSTER/DEMONSTRATION SESSIONS SATURDAY, APRIL 25

Session Time: 10:30 - 13:30

Room: Foyer

- C1. The display of conformal symmetry in lungs formation of human fetuses Galina Spirina, Russia
- C2. Emotional work and organizational culture in colombian health institutions. a multidimensional construction

Olga Helena Piñeros Mora, Carlos Armando Marín Valencia, Colombia

C3. Intra-work Conditions. Objective of the Organizational Management for the Healthy Company

Carlos Armando Marín Valencia, Olga Helena Piñeros Mora, Colombia

C4. Assessing the Impact of Variation Orders on Construction Projects In Tema Metropolis, Ghana

Isaac yeboah, Ghana

C5. A Suggetion of Human Error 3.0 Concept for the Safety of High-Reliability Systems

Lee yonghee, South Korea



POSTER/DEMONSTRATION SESSIONS SATURDAY, APRIL 25

Session Time: 14:30 - 16:30

Room: Foyer

The ergonomic evaluations of three front baby carriers: mother's D1. perspective

Chao-Yin Wu, Hsiao Rong Huang, Mao Jiun Wang, Taiwan

Simplified Indoor Localization Data Acquisition by Use of Recurrent LSTM D2. **Networks on Sequential Geomagnetic Vectors**

Benny Platte, Rico Thomanek, Christian Roschke, Tony Rolletschke, Frank Zimmer, Marc Ritter, Germany

D3. Human error evaluation: A case study in the control room of an alcohol plant using SPAR-H and CREAM techniques

Zeinab mosavianasl, Zahra Rezvani, zeynab sadat nezamodini, Iran

D4. Storage Practices of Concreting Materials on Construction Firms in Accra, Ghana

Paula agbeko, Ghana

D5. Creative process of construction of houses with recycled material

Jessica Vianney Garcia Vazquez, Miguel Angel Cruz Dominguez, Humberto Diaz Baleon, Mexico

