

ICTS4eHealth 2019 Program



Sunday, June 30 9:00 - 9:05

[ICTS4eHealth Opening: ICTS4eHealth Opening](#)

Chair: Massimo Villari (University of Messina, Italy)

Sunday, June 30 9:05 - 10:30

[ICTS4eHealth Workshop S1: Session 1 - Machine Learning](#)

Chair: Stefano Silvestri (Institute for High Performance Computing and Networking, ICAR-CNR, Italy)

9:05 Comparing the PaGMO Framework to a De-randomized Meta-Differential Evolution on Calculation and Prediction of Glucose Levels

[Tomas Koutny](#) (University of West Bohemia, Czech Republic); [Ivanoe De Falco](#) (CNR, Italy); [Antonio Della Cioppa](#) (University of Salerno, Italy); [Ernesto Tarantino](#) and [Umberto Scafuri](#) (Institute of High Performance Computing and Networking, ICAR-CNR, Italy); [Michal Krcma](#) (Diabetology Center, Pilsen Hospital University, Czech Republic); [Martin Ubl](#) (University of West Bohemia, Czech Republic)

9:22 The Prediction of Alcohol Use Disorder: A Scoping Review

[Ali Ebrahimi](#), [Uffe Kock Wiil](#), [Anette Søggaard Nielsen](#) and [Marjan Mansourvar](#) (University of Southern Denmark, Denmark)

9:39 Distilled Deep Learning Based Classification of Abnormal Heartbeat Using ECG Data Through a Low Cost Edge Deployable Device

[Morghan Hartmann](#) (University of Oklahoma-Tulsa, USA); [Hasan Farooq](#) and [Ali Imran](#) (University of Oklahoma, USA)

9:56 NLP for the Generation of Training Data Sets for Ontology-Guided Weakly-Supervised Machine Learning in Digital Pathology

[Robert Reihls](#) and [Heimo Mueller](#) (Medical University of Graz, Austria); [Andreas Holzinger](#) and [Kurt Zatloukal](#) (Medical University Graz, Austria); [Birgit Pohn](#) (University of Applied Sciences Technikum Wien & Medical University Graz, Austria)

10:13 A Decision-support Algorithm for Self-management of Anticoagulation Therapy Used in a Smartphone Application

[Martin Gerdes](#), [Berglind Smaradottir](#) and [Santiago Martinez](#) (University of Agder, Norway); [Jarle Jortveit](#) (Sørlandet Hospital Trust, Norway); [Rune Fensli](#) (University of Agder, Norway)

Sunday, June 30 10:30 - 11:00

Coffee Break: Coffee Break

Sunday, June 30 11:00 - 12:25

ICTS4eHealth Workshop S2: Session 2 -Imaging

Chair: Tomas Koutny (University of West Bohemia, Czech Republic)

11:00 Towards a Deeper Understanding of How a Pathologist Makes a Diagnosis: Visualization of the Diagnostic Process in Histopathology

[Birgit Pohn](#) (University of Applied Sciences Technikum Wien & Medical University Graz, Austria); [Andreas Holzinger](#) (Medical University Graz, Austria); [Heimo Mueller](#) (Medical University of Graz, Austria); [Kurt Zatloukal](#) (Medical University Graz, Austria); [Michaela Kargl](#) (Graz University of Technology, Austria); [Robert Reihls](#) (Medical University of Graz, Austria)

11:17 Culturally Evolved GANs for Generating Fake Stroke Faces

[Kaitav Nayankumar Mehta](#), [Ziad Kobti](#), [Kathryn Pfaff](#) and [Susan Fox](#) (University of Windsor, Canada)

11:34 Health@Hand - A Visual Interface for eHealth Monitoring

[Lars Nonnemann](#) (University of Rostock & Fraunhofer Institute for Computer Graphics Research, Germany); [Marian Haescher](#) (Fraunhofer Institute for Computer Graphics Research, Germany); [Mario Aehnelt](#) (Fraunhofer IGD, Germany); [Holger Diener](#) (Fraunhofer Institute for Computer Graphics Research, Germany); [Gerald Bieber](#) (Fraunhofer Institute for Computer Graphics, Germany); [Bodo Urban](#) (University of Rostock, Germany)

11:51 System of Upper Limb Motor Rehabilitation Training Using Leap Motion and Gear VR in Sessions of Game Therapy

[Ana Grasielle D Corrêa](#) (Avenida Corifeu de Azevedo Marques, Brazil)

12:08 Using Machine Learning to Study Flu Vaccines Opinions of Twitter Users

[Antonio Celesti](#), [Antonino Galletta](#), [Fabrizio Celesti](#), [Maria Fazio](#) and [Massimo Villari](#) (University of Messina, Italy)

Sunday, June 30 12:30 - 13:30

Lunch Break: Lunch Break

Sunday, June 30 13:30 - 14:55

ICTS4eHealth Workshop S3: Session 3 - Emerging Methodologies

Chair: Massimo Villari (University of Messina, Italy)

13:30 Towards Chronic Liver Dysfunction Self-monitoring: a Proof-of-Concept Study

[Danila Germanese](#) (National Research Council & Institute of Information Science and Technologies, Italy); [Sara Colantonio](#) (ISTI-CNR, Italy); [Mario D'Acunto](#) (Institute of Biophysics, Italy); [Maurizia Brunetto](#) and [Veronica Romagnoli](#) (University Hospital of Pisa, Italy)

13:51 Enhancing the Processing of Healthcare Data Streams Using Fog Computing

[Elarbi Badidi](#) (UAE University, United Arab Emirates); [Karima Moumane](#) (University Mohammed V in Rabat, Morocco)

14:12 Anonymous Multi-Source Counting statistics\\New Methodology and Application to the Health Sector

[T rence VT Delsate](#) and [Mohamed Boukhebouze](#) (Center of Excellence in Information and Communication Technologies, Belgium)

14:33 Data Science in Public Mental Health: A New Analytic Framework

[Charith Silva](#) (University of Salford, United Kingdom (Great Britain)); [Mahsa Saraee](#) (University of Manchester, United Kingdom (Great Britain)); [Mohamad Saraee](#) (University of Salford, Manchester, United Kingdom (Great Britain))

Sunday, June 30 15:00 - 15:30

Coffee Break: Coffee Break

Sunday, June 30 15:30 - 17:00

ICTS4eHealth Workshop S4: Session 4 - Text Analytics

Chair: Birgit Pohn (University of Applied Sciences Technikum Wien & Medical University Graz, Austria)

15:30 Improving Biomedical Information Extraction with Word Embeddings Trained on Closed-Domain Corpora

[Stefano Silvestri](#) and [Francesco Gargiulo](#) (Institute for High Performance Computing and Networking, ICAR-CNR, Italy); [Mario Ciampi](#) (Institute of High Performance Computing and Networking (ICAR-CNR), Italy)

15:48 Improving Communication in Risk Management of Health Information Technology Systems by Means of Medical Text Simplification

[Silvana Togneri MacMahon](#) (Dundalk Institute of Technology & Lero, Ireland); [Marco Alfano](#) (Dublin City University, Ireland); [Biagio Lenzitti](#) (University of Palermo, Italy); [Giosue' Lo Bosco](#) (University Of Palermo, Italy); [Fergal Mc Caffery](#) (, unknown); [Davide Taibi](#) (Consiglio Nazionale delle Ricerche, Italy); [Markus Helfert](#) (Dublin City University, Ireland)

16:06 FCIG Grammar Evaluation: A Usability Assessment of Clinical Guideline Modelling Constructs

[Yamiko Msosa](#) (University of Cape Town, South Africa & King's College London, United Kingdom (Great Britain))

16:24 Towards the Development of a Web Support System for Improving Accuracy in Coding Discharge Diagnosis

[Elena Cardillo](#) (Institute of Informatics and Telematics, National Research Council, Italy); [Lucilla Frattura](#) (Central Health Directorate, Friuli Venezia Giulia Region, Italy); [Salvatore Ciambrini](#) (Institute of Informatics and Telematics, National Research Council, Italy); [Claudio Eccher](#) (Fondazione Bruno Kessler, Italy); [Elia Nardo](#) and [Carlo Zavaroni](#) (Central Health Directorate, Friuli Venezia Giulia Region, Italy); [Vincenzo Della Mea](#) (University of Udine, Italy)

16:42 Optimizing the Research of DNA Sequences in a NoSQL Document Database: A Preliminary Study

[Fabrizio Celesti](#), [Antonio Celesti](#), [Maria Fazio](#), [Antonino Galletta](#) and [Massimo Villari](#) (University of Messina, Italy)

Sunday, June 30 17:01 - 17:15

ICTS4eHealth Best Paper: Best Paper Ceremony

Chair: Massimo Villari (University of Messina, Italy)

Sunday, June 30 17:16 - 17:20

[ICTS4eHealth Closing: ICTS4eHealth Closing](#)

Chair: Massimo Villari (University of Messina, Italy)