

Conference Programme

Thursday, June 22, 2017

14:00 - 15:30

GT1 Data Analysis and Knowledge Discovery

Chairs: Sameer Antani, Agma J. M. Traina

Amphitheater I

Fabian Prasser, Johanna Eicher, Raffael Bild, Helmut Spengler and Klaus Kuhn. A Tool for Optimizing De-Identified Health Data for Use in Statistical Classification

Natalia de Melo Franco, Augusto Lazzarotto de_Lima, Thiago Pinheiro Lima, Edson Alves da_Silva, Rinaldo José de_Lima, Robson do Nascimento Fidalgo. A Recall Analysis of Core Word Lists over Children's Utterances for Augmentative and Alternative Communication

George Lambrou, Ioanna Barbounaki, Fotini Tzortzatou-Stathopoulou, Ourania Petropoulou, Panagiotis Katrakazas, Dimitra Iliopoulou and Dimitrios -Dionysios Koutsouris. Computational Analysis of BRCA1 Mutations in Pediatric Patients with Malignancies and Their Mothers

Athanasios Lagopoulos, Anestis Fachantidis and Grigorios Tsoumakas. Multi-Label Modality Classification for Figures in Biomedical Literature

Retno Aulia Vinarti, Lucy Hederman. Personalization of Infectious Disease Risk Prediction: Towards Automatic Generation of a Bayesian Network

Mirela Teixeira Cazzolato, Lucas de Carvalho Scabora, Alceu Ferraz Costa, Marcos Roberto Nesso Junior, Luis Fernando Milano Oliveira, Daniel dos Santos Kaster, Caetano Traina Junior, Agma Juci Machado Traina. BREATH: Heat Maps Assisting the Detection of Abnormal Lung Regions in CT Scans

14:00 - 14:45

ST5 - Empowering Patients with Cancer through Connected Health

Chairs: Luis Fernandez Luque, Brian Caulfield

Amphitheater II

Haridimos Kondylakis, Anca Bucur, Feng Dong, Chiara Renzi, Andrea Manfrinati, Norbert Graf, Stefan Hoffman, Lefteris Koumakis, Gabriella Pravettoni, Kostas Marias, Manolis Tsiknakis and Stephan Kiefer. iManageCancer: Empowering patients and strengthening self-management in cancer diseases.

Francisco Monteiro-Guerra, Octavio Rivera-Romero, Vasiliki Mylonopoulou, Gabriel R. Signorelli, Francisco Zambrana and Luis Fernandez-Luque. The Design of a Mobile App for Promotion of Physical Activity and Self-Management in Prostate Cancer Survivors: Personas, Feature Ideation and Low-Fidelity Prototyping

Dominic O'Connor and Brian Caulfield. The application of neuromuscular electrical stimulation (NMES) technologies in cancer care

14:45 - 15:30

ST7 - MultiModal Interfaces for Natural Human Computer Interaction: Theory and Applications

Chairs: Spiros Nikolopoulos, Elisavet Chatzilari

Amphitheater II

Fotis Kalaganis, Elisavet Chatzilari, Kostas Georgiadis, Spiros Nikolopoulos, Nikos Laskaris and Yiannis Kompatsiaris. An Error Aware SSVEP-based BCI

Korok Sengupta, Jun Sun, Raphael Menges, Chandan Kumar and Steffen Staab. Analyzing the Impact of Cognitive Load in Evaluating Gaze-based Typing

Chandan Kumar, Raphael Menges and Steffen Staab. Assessing the Usability of Gaze-Adapted Interface against Conventional Eye-Based Input Emulation

15:30 - 16:00

Coffee Break

16:00 – 17:15

GT2 Decision Support Systems and Methods

Chairs: [Leontios Hadjileontiadis](#), [Anastasios Siountas](#)

Amphitheater I

[Harshani Perera](#), [Mohd Fairuz Shiratuddin](#), [Kok Wai Wong](#) and [Kelly Fullarton](#). EEG Signal Analysis of Real-word Reading and Nonsense-word Reading between Adults with Dyslexia and without Dyslexia

[Katerina Giannakaki](#), [Giorgos Giannakakis](#), [Christina Farmaki](#) and [Vangelis Sakkalis](#). Emotional state recognition using advanced machine learning techniques on EEG data

[Evanthia E. Tripoliti](#), [Theofilos G. Papadopoulos](#), [Georgia S. Karanasiou](#), [Fanis G. Kalatzis](#), [Yorgos Goletsis](#), [Aris Bechlioulis](#), [Silvia Ghimenti](#), [Tommaso Lomonaco](#), [Francesca Bellagambi](#), [Roger Fuoco](#), [Mario Marzilli](#), [Maria Chiara Scali](#), [Katerina K. Naka](#), [Abdelhamid Errachid](#), [Dimitrios I. Fotiadis](#). Estimation of Heart Failure Patients Medication Adherence through the Utilization of Saliva and Breath Biomarkers and Data Mining Techniques

[Erdem Corapcioglu](#) and [Hasan Ogul](#). Exploiting active microRNA interactions for diagnosis from expression profiling experiments

[Agnese Marchesi](#), [Alessandro Bria](#), [Claudio Marrocco](#), [Mario Molinara](#), [Francesco Tortorella](#), [Jan-Jurre Mordang](#) and [Nico Karssemeijer](#). The Effect of Mammogram Preprocessing on Microcalcification Detection with Convolutional Neural Networks

16:00 – 17:15

ST9 - Cloud Security and Data Privacy by Design

Chairs: [Iraklis Paraskakis](#)

Amphitheater II

[Matthias Gabel](#) and [Jeremias Mechler](#). Secure Database Outsourcing to the Cloud: Side-Channels, Counter-Measures and Trusted Execution.

Simeon Veloudis, Iraklis Paraskakis, Yiannis Verginadis, Ioannis Patiniotakis and Gregoris Mentzas. Ontological Templates for Regulating Access to Sensitive Medical Data in the Cloud

Antonis Michalas and Noam Weingarten. HealthShare: Using Attribute-Based Encryption for Secure Data Sharing Between Multiple Clouds

Gunther Schiefer, Murat Citak, Andreas Schoknecht, Matthias Gabel and Jeremias Mechler. Security in a Distributed Key Management Approach

17:15 – 17:30

Amphitheater I

Official Opening of the Conference

17:30 – 18:15

Amphitheater I

Keynote

NABIL ZARY

WHAT HAPPENS WHEN EDUCATIONAL TECHNOLOGY
BECOMES SEAMLESS – A CASE FROM SINGAPORE

Chair: Terry Poulton

18:15 – 19:00

Amphitheater I

Keynote

TONY SOLOMONIDES

DISCOVERY AND OPTIMIZATION OF DIAGNOSTIC
PATHWAYS

Chair: Alan Tucker

19:00 – 20:30

Wine Reception

Social Programme – Night Cruise (optional)

Friday, June 23, 2017

9:00 – 18:45

Foyer

EXHIBITION & POSTERS I

9:00 – 10:30

GT3 Decision Support and Recommendation Systems

Chairs: Alexandros Astaras, Daniel Sonntag

Amphitheater I

Fernando García-García, Eleni Metaxa, Stergios Christodoulidis, Marios Anthimopoulos, Nikolaos Kontopodis, Martina Correa-Londoño, Thomas R. Wyss, Yannis Papaharilaou, Christos V. Ioannou, Hendrik von Tengg-Kobligk and Stavroula Mougiakakou. Prognosis of abdominal aortic aneurysms: A machine learning-enabled approach merging clinical, morphometric, biomechanical and texture information

Alexander Zogkas, Sotiria Gilou, Inessa Kirsanidou, Chrysovalantis Korfitis, Christina Kemanetzi, Elizabeth Lazaridou, Panagiotis Bamidis and Alexander Astaras. A non-invasive medical decision support prototype system for Dermatology based on electrical impedance spectroscopy (DermaSense)

Juliano de Souza Gaspar, Zilma Silveira Nogueira Reis, Juliana Silva Barra. Is a Decision Support System Based on Robson's Classification Enough to Reduce Cesarean Section Rates?

Soudabeh Khodambashi, Florentin Moser, Jon Atle Gulla and Pekka Abrahamsson. Design and Development of a Mobile Decision Support System: Guiding Clinicians Regarding Law in the Practice of Psychiatry in Emergency Department

Daniel Sonntag and Hans-Jürgen Profitlich. Integrated decision support by combining textual information extraction, faceted search and information visualisation

Ivan Stojkovic and Zoran Obradovic. Predicting Sepsis Biomarker Progression under Therapy

9:00 – 10:30

Amphitheater II

Parallel Event (Open)

Chair: Nicolaos Dombros

Medical Curriculum Innovations: From theory to practice

Opening by **Panos Bamidis**, Aristotle University of Thessaloniki, Greece

Nabil Zary “Cognitive Computing meets Medical Education: Smarter Educational Data”, Nanyang Technological University, Singapore

Stathis Konstantinidis “Building healthcare workforce curricula based on the crowd: The CAMEI approach”, University of Nottingham, United Kingdom

Dimitrios Goulis, “Updating the Medical Curriculum at AUTH: principles and lessons learned so far”, Aristotle University of Thessaloniki, Greece

Martin Komenda, MEDCIN project: Overview, Masaryk University, Czech Republic

10:30 – 11:00

Coffee Break

11:00 – 12:30

ST1 - Ambient Assisted Living based on IoT Technologies

Chairs: Dimitris Koutsouris, Kostas Giokas

Amphitheater I

Nikolaos Katsivelis, Athanasios Anastasiou, Ourania Petropoulou, George Lambrou, Kostas Giokas and Dimitris Koutsouris. Applied technologies and Smart Home applications in the health sector

Giuseppe Palestra, Mohamed Rebiai, Estelle Corutial, Kostas Giokas and Dimitrios Koutsouris. A Fall Prevention System for the Elderly: Preliminary Results

Parisa Mohebbi, Eleni Stroulia and Ioanis Nikolaidis. Indoor Localization: A Cost-Effectiveness vs. Accuracy Study

Debora Cabral Nazario, Pedro J. Campos, Eduardo C. Inacio and Mario A. R. Dantas. Quality of Context

Evaluating Approach in AAL Environment using IoT Technology

Konstantinos L. Panayiotou, Sofia E. Reppou, George G. Karagiannis, Emmanouil G. Tsardoulis, Aristeidis G. Thallas, Andreas L. Symeonidis. Robotic applications towards an interactive alerting system for medical purposes

Penelope Ioannidou, Panagiotis Katrakazas, Stefanos Kollias, Michail Sarafidis, Dimitrios Koutsouris. HEAR?INFO: A modern mobile-web platform addressed to hard-of-hearing elderly individuals

11:00 – 12:30

Amphitheater II

Parallel Event cont'd (Open)

Medical Curriculum Innovations: From theory to practice

Luke Woodham, Curriculum mapping: motivation, goals and challenges, St. George's, University of London, United Kingdom

Robert Briggs, Martin Komenda, Matěj Karolyi, Christos Vaitsis, Dimitris Spachos and Luke Woodham. A Pilot Medical Curriculum Analysis and Visualization According to Medbiquitous Standards

Martin Komenda & Matěj Karolyi. MEDCIN platform: How to explore medical and healthcare curricula, Masaryk University, Czech Republic

Questions and answers

12:30 – 13:15

Amphitheater I

Keynote

NIKOS CHRISOCHOIDES

REAL-TIME DEFORMABLE REGISTRATION FOR BRAIN MRI AND ENABLING TECHNOLOGIES AT CRTG

Chair: *Anastasios Siountas*

13:15 – 14:00

Light Lunch Break

14:00 – 15:30

GT4 Technology Enhanced Medical Education and Simulation

Chairs: Meni Tsitouridou, Iraklis Paraskakis

Amphitheater I

Sudanthi Wijewickrema, Bridget Copson, Yun Zhou, Xingjun Ma, Robert Briggs, James Bailey, Gregor Kennedy and Stephen O'Leary. Design and Evaluation of a Virtual Reality Simulation Module for Training Advanced Temporal Bone Surgery

Hirenkumar Nakawala, Elena De Momi, Laura Erica Pescatori, Anna Morelli and Giancarlo Ferrigno. Inductive learning of the surgical workflow model through video annotations

Sina Jalali, Eleni Stroulia, Sarah Foster, Sarah Forgie, Amit Persad and Diya Shi. LiveBook: Competence Assessment with Virtual-Patient Simulations

Inga Hege, Andrzej A Kononowicz, Michal Nowakowski and Martin Adler. Implementation of process-oriented feedback in a clinical reasoning tool for virtual patients

Sema Candemir, Sameer Antani, Zhiyun Xue and George Thoma. Novel Method for Storyboarding Biomedical Videos for Medical Informatics

Stathis Th. Konstantinidis, Aaron Fecowycz, Kirstie Coolin, Heather Wharrad, George Konstantinidis and Panagiotis Bamidis. A Proposed Learner Activity Taxonomy and a Framework for Analysing Learner Engagement versus Performance using Big Educational Data

14:00 – 15:30

GT5 Biomedical Signal

Chairs: Behnaz Ghoraani, Christos Frantzidis

Amphitheater II

Vasiliki Zilidou, Christos Frantzidis, Ana Vivas, Maria Karagianni and Panagiotis Bamidis. Towards multi-parametric hub scoring of functional cortical brain networks: An electroencephalographic (EEG) study across lifespan

Kostas M. Tsiouris, Vasileios Pezoulas, Dimitrios D. Koutsouris, Dimitrios I. Fotiadis and Michalis Zervakis. Discrimination of Preictal and Interictal Brain States from Long-Term EEG Data

Negar Ahmadi, Yulong Pei and Mykola Pechenizkiy. Detection of Alcoholism based on EEG Signals and Functional Brain Network Features Extraction

Alexandros Tzallas, Nikolaos Giannakeas, Konstantinos Zoulis, Markos Tsipouras, Euripidis Glavas, Katerina Tzamourta, Loukas G. Astrakas and Spiros Konitsiotis. EEG Classification and Short-Term Epilepsy Prognosis using Brain Computer Interface Software

Mina Meshriky, Seif Eldawlatly and Gamal M. Aly. An Intermixed Color Paradigm for P300 Spellers: A Comparison with Gray-scale Spellers

Prasanth Ganesan, Kristina Shillieto and Behnaz Ghoraani. Simulation of Spiral Waves and Point Sources in Atrial Fibrillation with Application to Rotor Localization

Keynote

VANGELIS KARKALETSIS

UNOBTRUSIVE CLINICAL MONITORING WITH ROBOTS
IN AAL ENVIRONMENTS: THE RADIO ECOSYSTEM

Chair: Dimitris Koutsouris

15:30 – 16:15

Amphitheater I

16:15 – 16:45

Coffee Break

16:45 – 18:00

**ST4 - Computer-aided and robotic endoscopy
systems**

Chairs: Dimitris Iakovidis, Anastasios Koulaouzidis

Amphitheater I

Alexandros Rikos, Fons van der Sommen, Anne-Fré Swager, Svitlana Zinger, Wouter Curvers, Erik Schoon, Jacques Bergman and Peter de With. Improved

Barrett's Cancer Detection in Volumetric Laser Endomicroscopy scans using Multiple-Frame Voting

Chuanhai Zhang, Wallapak Tavanapong, Johnny Wong, Piet C. de Groen and Junghwan Oh. Real-Time Instrument Scene Detection in Screening GI Endoscopic Procedures

Ahmed Mohammed, Sule Yildirim, Marius Pedersen, Øistein Hovde and Faouzi Cheikh. Sparse coded handcrafted and deep features for colon capsule video summarization

George Dimas, Dimitris Iakovidis, Alexandros Karagyris, Gastone Ciuti and Anastasios Koulaouzidis. Visual Localization of Wireless Capsule Endoscopes Aided by Artificial Neural Networks

Bashir Dodo, Yongmin Li and Xiaohui Liu. Retinal OCT Image Segmentation Using Fuzzy Histogram Hyperbolization and Continuous Max-Flow

16:45 – 18:00

GT6: eHealth studies

Chairs: Carolyn Mcgregor, Bridget Kane

Amphitheater II

Mandana Omidbakhsh and Olga Ormandjieva. Comparing the Quality of Numeracy Assessment Methods in Healthcare

Chunhui Guo, Zhicheng Fu, Shangping Ren, Yu Jiang, Maryam Rahmaniheris and Lui Sha. Pattern-Based Statechart Modeling Approach for Medical Best Practice Guidelines - A Case Study

Bridget Kane and Saturnino Luz. Trust, Ethics and Access: Challenges in studying the work of Multidisciplinary Medical Teams

Renan Vinicius Aranha, Leonardo Souza Silva, Marcos Lordello Chaim and Fátima De Lourdes Dos Santos Nunes. Using Affective Computing to automatically adapt serious games for rehabilitation

18:00 – 18:45

Amphitheater I

Keynote

DIMITRIS FOTIADIS

TAILORING HEALTH TREATMENT TO THE INDIVIDUAL:
FROM HEALTH RELATED DATA TO ACTIONABLE
KNOWLEDGE

Chair: Constantinos S. Pattichis

20:00

Social Programme – Conference Dinner

Saturday, June 24, 2017

9:00 – 15:45

Foyer

POSTERS II

9:00 – 15:45

Foyer

**UNCAP 3rd Annual Conference and Exhibition:
“Technology supporting an ageing population
with Dignity and respect
(parallel open event)**

9:00 – 11:00

**ST3 - Immersive Personalized Patient Engagement;
Computer Based Medical Intervention Systems**

Chairs: Panagiotis Antoniou, Daphne Economou

Amphitheater I

Guido Giunti, Diego Giunta, Santiago Hors-Fraile, Minna Isomursu and Diana Karosevičiūtė. Detecting Gamification in Breast Cancer Apps: an automatic methodology for screening purposes

Guido Giunti, Estefania Guisado-Fernandez and Brian Caulfield. Connected Health in Multiple Sclerosis: a mobile applications review

Barbara Villarini, Hykoush Asaturyan, E. Louise Thomas, Rhys Mould and Jimmy D Bell. A Framework for Morphological Feature Extraction of Organs from MR Images for Detection and Classification of Abnormalities

Michael Aupetit, Luis Fernandez-Luque, Meghna Singh and Jaideep Srivastava. Visualization of Wearable Data and Biometrics for Analysis and Recommendations in Childhood Obesity

Meghna Singh, Luis Fernandez-Luque and Jaideep Srivastava. The 360QS Toolkit for Sleep and Physical Activity Analysis based on Wearables

Daphne Economou, Miriam Dwek, Claire Roberston, Elliott Bradley, Thanos Kounenis, Mohammad Ramezani, Nathan Bell and Tayebah Azimi. PhytoCloud: A Gamified Mobile Web Application to Modulate Diet and Physical Activity of Women with Breast Cancer

Panagiotis Antoniou, Octavio Rivera-Romero, Maria Karagianni and Panagiotis Bamidis. Towards evidence based m-health application design in cancer patient healthy lifestyle interventions.

Panagiotis Antoniou, Vasiliki Zilidou, Anastasios Siountas and Panagiotis Bamidis. Virtual scenarios for stealth assessment of the elderly; Perceptions and acceptance of technology-based health and wellness interventions.

9:00 – 11:00

ST2 - Social data and medical data analytics

Chairs: Pedro Pereira Rodrigues, Athena Vakali

Amphitheater II

Rüdiger Pryss, Thomas Probst, Winfried Schlee, Johannes Schobel, Berthold Langguth, Patrick Neff, Myra Spiliopoulou and Manfred Reichert. Mobile Crowdsensing for the Juxtaposition of Realtime Assessments and Retrospective Reporting for Neuropsychiatric Symptoms

Natalia Reguera, Laia Subirats and Manuel Armayones. Mining Facebook data of people with rare diseases

Ernestina Menasalvas-Ruiz, Consuelo Gonzalo, Juan Manuel Tuñas, Alejandro Rodríguez González, Mariano Provencio, Cristina Gonzalez de Pedro, Marta Mendez, Olga Zaretskaia, Juan Luis Cruz, Jesús Rey and Consuelo Parejo. OncoCall: analyzing the outcomes of the oncology telephone patient assistance

Zhijun Yin, Lijun Song and Bradley Malin. Reciprocity and Its Association with Treatment Adherence in an Online Breast Cancer Forum

Uli Niemann, Myra Spiliopoulou, Bernhard Preim, Till Ittermann and Henry Völzke. Combining Subgroup Discovery and Clustering to Identify Diverse Subpopulations in Cohort Study Data

Pablo Ferri-Borredà, Carlos Sáez and Juan Miguel García-Gómez. Discovering data source stability patterns in biomedical repositories based on simplicial projections from probability distribution distances

Daniela Ferreira-Santos and Pedro Pereira Rodrigues. Improving diagnosis in Obstructive Sleep Apnea with clinical data: a Bayesian network approach

Nouf Albarakati and Zoran Obradovic. Disease-Based Clustering of Hospital Admission: Disease Network of Hospital Networks Approach

11:00 – 11:30

Coffee Break

11:30 – 12:30

GT7 Medical Imaging I

Chairs: Efthymoulos Kyriacou, Daniela Giordano

Amphitheater I

Benedetta Savelli, Alessandro Bria, Claudio Marrocco, Mario Molinara, Francesco Tortorella, Adrian Galdran and Aurélio Campilho. Illumination correction by dehazing for retinal vessel segmentation

Alexander Naitzat, Emil Saucan and Yehoshua Zeevi. A differential geometry approach for change detection in medical images.

Christos P Loizou, Christos Papacharalambous, Giorgos Samaras, Efthivoulos Kyriakou, Takis Kasparis, Marios Pantziaris, Eleni Eracleous and Constandinos S Pattichis. Brain Image and Lesions Registration and 3D Reconstruction in Dicom MRI Images

Daniela Giordano, Carmelo Pino, Isaak Kavasidis, Concetto Spampinato, Massimo Di Pietro, Renata Rizzo, Anna Scuderi and Rita Barone. An Eye Tracker-based Computer System to Support Oculomotor and Attention Deficit Investigations

11:30 – 12:30

GT8: Ask the Editors

Chairs: Pedro Pereira Rodrigues

Amphitheater II

Editors-In-Chief of three PubMed journals publishing research on Healthcare Technology present their journals' interests. The audience may interact to obtain guidelines and best recipes for papers to be prepared for acceptance!

Prof. Dimitrios Fotiadis, IEEE EMB Journal of Biomedical and Health Informatics
Dr. Luis Kun, Springer Journal of Health & Technology
Prof. Stefanos Triaridis, Hippokratia Medical Journal

12:30 – 13:15

Amphitheater I

Keynote

LUIS KUN

GEOMEDICINE: THE KEY TO PERSONALIZED HEALTH,
WELLNESS AND DISEASE PREVENTION

Chairs: Anne Wilson, Giuseppe Conti

13:15 – 14:00

Light Lunch Break

14:00 – 14:45

Amphitheater I

Recorded Keynote from AIME Conf

Kenneth J. (KEN) Barker

Chair: Charalampos Bratsas

14:45 – 15:45

Amphitheater I

GT9: Games, Robotics and smart technologies

Chairs: Ilias Maglogiannis, Evdokimos Konstantinidis

S. B. Dias, Evdokimos Konstantinidis, J. A. Diniz, Panagiotis Bamidis, V Charisis, S Hadjidimitriou, M. Stadtschnitzer, P. Fagerberg, I Ioakeimidis, K Dimitropoulos, N Grammalidis and Leontios Hadjileontiadis. On supporting Parkinson's Disease patients: The i-PROGNOSIS Personalized Game Suite design approach

Efthymoulos Kyriacou, Andrew Nicolaides, Alexandra Constantinou, Maura Griffin, Christos Loizou, Marios S. Pattichis, Hamed Nasrabadi, Constantinos S. Pattichis. Carotid Bifurcation Plaque Stability Estimation based on Motion Analysis

Andreas Menychtas, Charalampos Doukas, Panayiotis Tsanakas and Ilias Maglogiannis. A Versatile Architecture for Building IoT Quantified-Self Applications

Alkinoos Athanasiou, George Arfaras, Ioannis Xygonakis, Panagiotis Kartsidis, Niki Pandria, Kyriaki Rafailia Kavazidi, Alexander Astaras, Nicolas Foroglou, Konstantinos Polyzoidis and Panagiotis Bamidis. Commercial BCI Control And Functional Brain Networks in Spinal Cord Injury: A Proof-of-Concept

14:45 – 15:45

Amphitheater II

GT10 Medical Imaging II

Chairs: Christos P Loizou, Alexandros Tzallas

Harshita Sharma, Norman Zerbe, Christine Böger, Stephan Wienert, Olaf Hellwich and Peter Hufnagl. A comparative study of cell nuclei attributed relational

graphs for knowledge description and categorization in histopathological gastric cancer whole slide images

Panagiota Tsompou, Panagiotis Siogkas, Antonis Sakellarios, Pedro Lemos, Lampros Michalis and Dimitrios Fotiadis. Non-Invasive Assessment of Coronary Stenoses and Comparison to Invasive Techniques: a proof-of-concept study

Dimosthenis C. Tsouros, Panagiotis N. Smyrlis, Nikolaos Giannakeas, Alexandros T. Tzallas, Pinelopi Manousou, Dimitrios G. Tsalikakis and Markos G. Tsipouras. Automated collagen proportional area extraction in liver biopsy images using a novel classification via clustering algorithm

Steve Counsell, Stephen Swift and Allan Tucker. A Deconstructed Replication of Time of Test Using the AGIS Metric (Skyline paper)

15:45 – 16:15

Amphitheater I

Conference closing **ceremony** and awards

Conference Organization

Conference Chairs

Panagiotis D. Bamidis, Aristotle University of Thessaloniki, GR

Stathis Th. Konstantinidis, University of Nottingham, UK

Pedro Pereira Rodrigues, University of Porto, PT

PC Chairs

Constantinos S. Pattichis, University of Cyprus,

CY Alan Tucker, Brunel University, UK

Dimitris Koutsouris, National Technical University of Athens, GR

Special Track Chairs

Adele Marshall, Queen's University Belfast, UK

Ilias Maglogiannis, University of Piraeus, GR

Daniela Giordano, University of Catania, IT

Publicity Chairs

Carolyn McGregor, University of Ontario

Institute of Technology, CA

Luis Fernandez Luque, Qatar Computing Research Institute, QA

Gregor Stiglic, Maribor, Slovenia

Publication Chairs

Sameer Antani, National Library of Medicine, USA

Bridget Kane, Karlstad University, SE

*Anthony Solomonides, NorthShore University HealthSystem Research Institute,
USA*

Financial Chair

Charalampos Bratsas, OKFN, GR

Maria Nikolaidou, OKFN, GR

Student Award/Competition Chairs

Thrasyvoulos Tsiatsos, Aristotle University of Thessaloniki, GR

George Anastassopoulos, Democritus University of Thrace, GR

Exhibition Chairs

Athos Antoniadis, Stremble Venture Ltd, CY

Pascal Staccini, University Nice-Sophia Antipolis, FR

Special Track

AMBIENT ASSISTED LIVING BASED ON IOT TECHNOLOGIES

Chairs

Dimitris Koutsouris, National Technical University of Athens, GR

Kostas Giokas, National Technical University of Athens, GR

Special Track AMBIENT ASSISTED LIVING BASED ON IOT TECHNOLOGIES

Chairs

Alejandro Rodríguez-González, Universidad Politécnica de Madrid, SP

Athena Vakali, Aristotle University of Thessaloniki, GR

Miguel A. Mayer, Universitat Pompeu Fabra, SP

Takashi Okumura, National Institute of Public Health, JP

Ernestina Menasalvas-Ruiz, Universidad Politécnica de Madrid, SP

Myra Spiliopoulou, Otto-von-Guericke University Magdeburg, DE

Special Track IMMERSIVE PERSONALIZED PATIENT ENGAGEMENT;
COMPUTER BASED MEDICAL INTERVENTION SYSTEMS

Chairs

Panagiotis Antoniou, Aristotle University of Thessaloniki, GR

Daphne Economou, University of Westminster, UK

Luis Fernandez-Luque, Qatar Computing Research Institute, QA

Special Track

COMPUTER-AIDED AND ROBOTIC ENDOSCOPY SYSTEMS

Chairs

Dimitris K. Iakovidis, University of Thessaly, GR

Anastastios Koulaouzidis, University of Edinburgh, UK

Gastone Ciuti, Institute of Scuola Superiore Sant'Anna, IT

Alexandros Karargyris, IBM Research, CA, USA

Special Track

EMPOWERING PATIENTS WITH CANCER THROUGH CONNECTED HEALTH

Chairs

Brian Caulfield, Insight Center, University Colleague Dublin, IR

Luis Fernandez Luque, Qatar Computing Research Institute, HBKU, Qatar;

Salumedía, Seville, SP

Matilde Mora Fernández, University of Seville, SP Octavio Rivera, University of Seville, SP

Stephan Kiefer, Fraunhofer-Institut Biomedizinische Technik (IBMT), DE

Haridimos Kondylakis, Institute of Computer Science, FORTH, GR

Special Track

BIOMEDICAL IMAGING AND SIGNAL PROCESSING TOOLS FOR CARDIAC
ARRHYTHMIAS: DIAGNOSIS, TREATMENT PLANNING AND THERAPY
DELIVERY

Chairs

Behnaz Ghoraani, Florida Atlantic University, USA

Cristian A. Linte, Rochester Institute of Technology, USA

Special Track

MULTIMODAL INTERFACES FOR NATURAL HUMAN COMPUTER
INTERACTION: THEORY AND APPLICATIONS

Chairs

Spiros Nikolopoulos, Centre for Research and Technology Hellas, GR

Elisavet Chatzilari, Centre for Research and Technology Hellas, GR

Chandan Kumar, University of Koblenz, DE

Plotnik Meir, SHEBA Medical Center, IL

Special Track

BIOLOGICAL NETWORK ANALYSIS IN COMPUTATIONAL BIOLOGY AND
BIOMEDICINE

Chairs

*Giuseppe Agapito, Department of Medical and Surgical Sciences, Magna Graecia
University of Catanzaro, IT*

*Pietro Hiram Guzzi Department of Medical and Surgical Sciences, Magna Graecia
University of Catanzaro, IT*

Special Track

CLOUD SECURITY AND DATA PRIVACY BY DESIGN

Chairs

*Iraklis Paraskakis, SEERC, The University of Sheffield International Faculty, CITY
College, GR*

*Gregoris Mentzas, National Technical University of Athens, Greece Christian
Gehrmann, SICS, SE*

Antonios Michalas, University of Westminster, UK

Jörn Müller-Quade, KIT, DE

Yiannis Verginadis, National Technical University of Athens, GR