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Monday, October 29, 2018

A1L-A: 08:30-10:00 Ambassador C
Bio-Circuits & Systems (Oral Session)
Chair: Robert Sobot (*ENSEA - Université Cergy-Pontoise - CNRS*)
Co-Chair: Takashi Tokuda (*Nara Institute of Science and Technology (NAIST)*)

9:06 A1L-A.3
A Multichannel Wireless sEMG Sensor Endowing a 0.13 μ m CMOS Mixed-Signal SoC 1-4
Gabriel Gagnon-Turcotte (*Université Laval*); Cheikh Latyr Fall (*Université Laval*); Quentin Mascaret (*Université Laval*); Mathieu Bielmann (*Université Laval*); Laurent Bouyer (*Université Laval*); Benoît Gosselin (*Université Laval*)

9:24 A1L-A.4
Robust R-Wave Detection Under Long-Term Measurement Using HRV Sensor System with Automatic Gain Readjustment 5-8
Kento Shoji (*Kumamoto University*); Toshitaka Yamakawa (*Kumamoto University*); Tadashi Sakata (*Kumamoto University*); Yuichi Ueda (*Kumamoto University*)

A1L-B: 08:30-10:00 Ambassador A
SPECIAL SESSION: Innovative Circuits & Techniques for Bio-Sensing, Stimulation, & Interfacing (Oral Session)
Chair: Amir Sodagar (*York University*)
Co-Chair: Hossein Kassiri (*York University*)

8:30 A1L-B.1
Wireless Optoelectronic Fiber Photometry Headstage for Deep Brain Structures Monitoring 9-12
Mehdi Noormohammadi Khiaarak (*Université Laval*); Sylvain Martel (*Polytechnique Montréal*); Yves De Koninck (*Université Laval*); Benoît Gosselin (*Université Laval*)

8:48 A1L-B.2
A Novel Fully Differential NMR Transceiver 13-16
Narges Hossein-Zadeh (*Imamreza University*); Mojtaba Daliri (*Imamreza University*); Sebastian Magierowski (*York University*); Ebrahim Ghafar-Zadeh (*York University*)

9:06 A1L-B.3
High-Rate Ultrasonic Link for Data Telemetry to Implantable Biomedical Microsystems Using Pulse Excitation 17-20
Keivan Keramatzadeh (*K.N. Toosi University of Technology*); Amir Sodagar (*York University*)

9:24 A1L-B.4
Design, Implementation, and Test of an Adiabatic Stimulation Back-End for Implantable Optical Stimulation Microsystems 21-24
Mohammad Bakhtiari (*K.N. Toosi University of Technology*); Ahmad Ghannadan-Zadeh (*K.N. Toosi University of Technology*); Farhad Akbari-Boroumand (*K.N. Toosi University of Technology*); Amir Sodagar (*York University*)

9:42 A1L-B.5
Power Efficiency and Power Delivery Measurement in Inductive Links with Arbitrary Source and Load Impedance Values 25-28
Seyedabdollah Abdollah Mirbozorgi (*University of Alabama at Birmingham*); Yaoyao Jia (*Georgia Institute of Technology*); Maysam Ghovanloo (*Georgia Institute of Technology*)

A1P-C: 10:00-17:00	Foyer
Bio-Circuits & Systems (Poster Session)	
Chair: Carolina Mora Lopez (<i>imec</i>)	

Miniaturized Wireless Cell Spectrophotometer Platform in Visible and Near-IR Range	A1P-C.4 29-32
Vahid Khojasteh Lazarjan (<i>Université Laval</i>); Mehdi Noormohammadi Khiaarak (<i>Université Laval</i>); Anahita Bakhshizadeh Gashti (<i>Université Laval</i>); Alain Garnier (<i>Université Laval</i>); Benoît Gosselin (<i>Université Laval</i>)	
Computer-Aided Diagnosis System for Alzheimer's Disease Using Fuzzy-Possibilistic Tissue Segmentation and SVM Classification	A1P-C.5 33-36
Lilia Lazli (<i>Université du Québec à Montréal</i>); Mounir Boukadoum (<i>Université du Québec à Montréal</i>); Otmane Ait Mohamed (<i>Concordia University</i>)	

A1P-D: 10:00-17:00	Foyer
Biosensors & Biomedical Signals (Poster Session)	
Chair: Behnaz Ghoraani (<i>Florida Atlantic University</i>)	

Space Curve Approach for IVUS Image Segmentation	A1P-D.2 37-40
Abdelaziz Hammouche (<i>University of Montreal</i>); Guy Cloutier (<i>University of Montreal</i>); Jean-Claude Tardif (<i>Montreal Heart Institute</i>); Jean Meunier (<i>University of Montreal</i>)	
Development of a Rotor-Mapping Algorithm to Locate Ablation Targets During Atrial Fibrillation	A1P-D.3 41-44
Prasanth Ganesan (<i>Florida Atlantic University</i>); Elizabeth Cherry (<i>Rochester Institute of Technology</i>); Arkady Pertsov (<i>Upstate Medical University</i>); Behnaz Ghoraani (<i>Florida Atlantic University</i>)	
Segmentation of Patient Images in the Neonatal Intensive Care Unit	A1P-D.4 45-48
Yasmina Souley Dossso (<i>Carleton University</i>); Amente Bekele (<i>Carleton University</i>); Shermeen Nizami (<i>Carleton University</i>); Cheryl Aubertin (<i>Children's Hospital of Eastern Ontario</i>); Kim Greenwood (<i>Children's Hospital of Eastern Ontario</i>); Joann Harrold (<i>Children's Hospital of Eastern Ontario</i>); James R. Green (<i>Carleton University</i>)	
Efficiency of Voice Features Based on Consonant for Detection of Parkinson's Disease	A1P-D.5 49-52
Rekha P M Viswanathan (<i>RMIT Univ.</i>); Parham Khojasteh (<i>RMIT Univ.</i>); Behzad Aliahmad (<i>RMIT Univ.</i>); Sridhar Arjunan (<i>RMIT Univ.</i>); Sanjay Ragnav (<i>Monash Medical Centre</i>); Peter Kempster (<i>Monash Health</i>); Kitty Wong (<i>Monash Health</i>); Jennifer Nagao (<i>Monash Health</i>); Dinesh Kant Kumar (<i>RMIT Univ.</i>)	
Feature Analysis of Electroencephalography in Patients with Depression	A1P-D.6 53-56
Risa Nakamura (<i>Keio University</i>); Yasue Mitsukura (<i>Keio University</i>)	

A1P-E: 10:00-17:00	Foyer
Cognitive Computing & Deep Learning in Life Sciences (Poster Session)	
Chair: Hao Yu (<i>Southern University of Science Technology (SUSTech)</i>)	

Automated Enumeration and Classification of Bacteria in Fluorescent Microscopy Imagery	A1P-E.1 57-60
Yongjian Yu (<i>Axon Connected, LLC</i>); Jue Wang (<i>Union College</i>)	
Identifying the Cells' Nuclei Using Deep Learning	A1P-E.2 61-64
Roger Booto Tokime (<i>Universite de Moncton</i>); Hassan Ellassady (<i>Universite de Moncton</i>); Moulay Akhloufi (<i>Universite de Moncton</i>)	

Radiomics to Predict Response to Neoadjuvant Chemotherapy in Rectal Cancer: Influence of Simultaneous Feature Selection and Classifier Optimization	A1P-E.3 65-68
Samanta Rosati (<i>Politecnico di Torino</i>); Claudia Maria Gianfreda (<i>Politecnico di Torino</i>); Gabriella Balestra (<i>Politecnico di Torino</i>); Valentina Giannini (<i>University of Turin</i>); Simone Mazzetti (<i>University of Turin</i>); Daniele Regge (<i>University of Turin</i>)	
Posture Recognition Using an RGB-D Camera: Exploring 3D Body Modeling and Deep Learning Approaches	A1P-E.4 69-72
Mohamed El Amine Elforaici (<i>TÉLUQ University</i>); Ismail Chaaraoui (<i>TÉLUQ University</i>); Wassim Bouachir (<i>TÉLUQ University</i>); Youssef Ouakrim (<i>TÉLUQ University</i>); Neila Mezghani (<i>TÉLUQ University</i>)	
Radiomics for Identification of Active Bone Marrow from CT: An Exploratory Study	A1P-E.5 73-76
Samanta Rosati (<i>Politecnico di Torino</i>); Gabriella Balestra (<i>Politecnico di Torino</i>); Pierfrancesco Franco (<i>Università di Torino</i>); Christian Fiandra (<i>Università di Torino</i>); Francesca Arcadipane (<i>Università di Torino</i>); Patrick Silveti (<i>Università di Torino</i>); Umberto Ricardi (<i>Università di Torino</i>); Elena Gallio (<i>A.O.U. Città della Salute e della Scienza di Torino</i>)	
State Based Hidden Markov Models for Temporal Pattern Discovery in Critical Care	A1P-E.6 77-80
Catherine Inibhunu (<i>University of Ontario Institute of Technology</i>); Carolyn McGregor (<i>University of Ontario Institute of Technology</i>)	
A1P-F: 10:00-17:00	Foyer
Control & Signal Processing for LS (Poster Session) Chair: Paresa Modarres (<i>McGill University</i>)	
Aptamers-Based Gold-Micro-Array for High-Selective Detection of Bacteria Using Fluorescence Microscopy	A1P-F.1 81-84
Mitra Salami (<i>Hakim Sabzevari University</i>); Mohammad Hadi Shahrokh Abadi (<i>Hakim Sabzevari University Sabzevar</i>); Khadijeh Nejad Shahrokh Abadi (<i>Islamic Azad University of Mashhad</i>); Mohamad Sawan (<i>Polytechnique Montréal</i>)	
Predictions of Genetic Circuit Behaviors Based on Modular Composition in Transiently Transfected Mammalian Cells	A1P-F.2 85-88
Junmin Wang (<i>Boston University</i>); Samuel Isaacson (<i>Boston University</i>); Calin Belta (<i>Boston University</i>)	
High Level Modeling of Building Automation and Control Systems Based on Perceptual Knowledge	A1P-F.4 89-92
Jannik Flessner (<i>Jade University of Applied Sciences</i>); Melina Frenken (<i>Jade University of Applied Sciences</i>)	
A3L-A: 13:30-15:00	Ambassador C
Biosensors & Biomedical Signals (Oral Session) Chair: Michael Liebling (<i>Idiap Research Institute</i>) Co-Chair: Kiyotaka Sasagawa (<i>Nara Institute of Science and Technology (NAIST)</i>)	
14:06	A3L-A.3 93-96
Bicoherence of Intracranial EEG: A Novel Precursor of Seizure Activity in Canine Epilepsy	
Laura Gagliano (<i>Polytechnique Montréal</i>); Elie Bou Assi (<i>Polytechnique Montréal</i>); Mohamad Sawan (<i>Polytechnique Montréal</i>); Dang Khoa Nguyen (<i>University of Montreal Hospital Center, University of Montreal</i>)	
14:24	A3L-A.4 97-100
Signal and Noise Sources from Microwire Arrays Implanted in Rodent Cortex	
Avery Tye Gardner (<i>University of Utah</i>); Ross M. Walker (<i>University of Utah</i>); Hunter J. Strathman (<i>University of Utah</i>); David J. Warren (<i>University of Utah</i>)	

14:42	A3L-A.5
Considering Skin Inhomogeneity in Photoplethysmography-Based Local Pulse Transit Time Measurement	101-104
Nils Beckmann (<i>University of Duisburg-Essen</i>); Reinhard Viga (<i>University of Duisburg-Essen</i>); Aysegül Dogangün (<i>University of Duisburg-Essen</i>); Anton Grabmaier (<i>University of Duisburg-Essen</i>)	

A3L-B: 13:30-15:00	Ambassador A
SPECIAL SESSION: Sensors & Actuators for Animal Models (Oral Session)	
Chair: Sylvain Martel (<i>École Polytechnique de Montréal</i>)	
Co-Chair: Benoît Gosselin (<i>Laval University</i>)	

14:24	A3L-B.4
Pressure Ulcer Prevention System: Validation in a Clinical Setting	105-108
Devdip Sen (<i>Worcester Polytechnic Institute</i>); John McNeill (<i>Worcester Polytechnic Institute</i>); Yitzhak Mendelson (<i>Worcester Polytechnic Institute</i>); Raymond Dunn (<i>University of Massachusetts Medical School</i>); Kelli Hickie (<i>University of Massachusetts Medical School</i>)	

A4L-A: 15:30-17:00	Ambassador C
Cognitive Computing & Deep Learning in Life Sciences (Oral Session)	
Chair: Sameer Antani (<i>NIH/NLM/LHC</i>)	
Co-Chair: Neila Mezghani (<i>TÉLUQ University / CHUM</i>)	

15:30	A4L-A.1
Deep Learning for Grading Cardiomegaly Severity in Chest X-Rays: An Investigation	109-113
Sema Candemir (<i>National Library of Medicine, NIH</i>); Sivaramakrishnan Rajaraman (<i>National Library of Medicine, NIH</i>); George Thoma (<i>National Library of Medicine, NIH</i>); Sameer Antani (<i>National Library of Medicine, NIH</i>)	

15:48	A4L-A.2
A Compact Deep Learning Network for Temporal Sleep Stage Classification	114-117
Akos Vetek (<i>Nokia Bell Labs</i>); Kiti Müller (<i>Nokia Bell Labs</i>); Harri Lindholm (<i>Nokia Bell Labs</i>)	

16:06	A4L-A.3
Deep Learning Based Method for Output Regularization of the Seizure Prediction Classifier	118-121
Ahmad Chamseddine (<i>Polytechnique Montréal</i>); Mohamad Sawan (<i>Polytechnique Montréal</i>)	

16:24	A4L-A.4
Neurodegenerative Disease Prediction Based on Gait Analysis Signals Acquired with Force-Sensitive Resistors	122-125
Roger Selzler (<i>Carleton University</i>); James R. Green (<i>Carleton University</i>); Rafik Goubran (<i>Carleton University</i>)	

16:42	A4L-A.5
Applications of Machine Learning Methods in Retrospective Studies on Hearing	126-129
Francois Charih (<i>Carleton University</i>); Ashlynn Steeves (<i>Carleton University</i>); Matthew Bromwich (<i>Children's Hospital of Eastern Ontario</i>); Amy E. Mark (<i>Clearwater Clinical</i>); Renée Lefrançois (<i>Clearwater Clinical</i>); James R. Green (<i>Carleton University</i>)	

A4L-B: 15:30-17:00	Ambassador A
SPECIAL SESSION: Creating a Culture of Collaboration (Oral Session)	
Chair: Carole C. Carey (<i>IEEE Standards Association</i>)	

15:30	A4L-B.1
Applying a Computational Model Credibility Framework to Physiological Closed-Loop Controlled Medical Device Testing	130-133
Christopher Scully (<i>US Food and Drug Administration</i>); Pras Pathmanathan (<i>US Food and Drug Administration</i>); Chathuri Daluwatte (<i>US Food and Drug Administration</i>); Farid Yaghoubi (<i>US Food and Drug Administration</i>); Richard Gray (<i>US Food and Drug Administration</i>); Sandy Weininger (<i>US Food and Drug Administration</i>); Tina Morrison (<i>US Food and Drug Administration</i>); Bahram Parvinian (<i>US Food and Drug Administration</i>)	

16:00	A4L-B.2
Brain-Computer Interface Systems: Why a Standard Model Is Essential	134-137
Luigi Bianchi (<i>Tor Vergata University of Rome</i>)	
16:30	A4L-B.3
Collaborative Model for Stakeholder Engagement in Consensus Standards Development: A Process Metrics Measurement Based Approach	138-141
Pradeep Balachandran (<i>IEEE P2650 Standards Working Group</i>); Carole Carey (<i>C3-Carey Consultants, LLC</i>)	

Tuesday, October 30, 2018

B1L-A: 08:30-10:00	Ambassador C
Engineering for Life Sciences (Oral Session)	
Chair: Behnaz Ghoraani (<i>Florida Atlantic University</i>)	
Co-Chair: Jennifer Blain Christen (<i>Arizona State University</i>)	

8:30	B1L-A.1
Fitting Rank Order Data in the Age of Context	142-146
Kevin Dick (<i>Carleton University</i>); James R. Green (<i>Carleton University</i>)	

8:48	B1L-A.2
Veterinary Medicine Engineering	147-149
Nadja Bressan (<i>University of Prince Edward Island</i>); Catherine Creighton (<i>University of Prince Edward Island</i>)	

9:06	B1L-A.3
Assay Development and Storage for Fluorescence-Based Lateral Flow Immunoassay	150-153
Ching-Wen Hou (<i>Arizona State University</i>); Meilin Zhu (<i>Arizona State University</i>); Karen S. Anderson (<i>Arizona State University</i>); Uwadiae Obahiagbon (<i>Arizona State University</i>); Jennifer Blain Christen (<i>Arizona State University</i>)	

9:24	B1L-A.4
Computational Model of Optogenetic Stimulation in a Peripheral Nerve	154-158
Nicholas Fritz (<i>Arizona State University</i>); Daniel Gulick (<i>Arizona State University</i>); Jennifer Blain Christen (<i>Arizona State University</i>)	

9:42	B1L-A.5
A Practical Guide to Circuit Selection for Portable Microprocessor-Based, Low Component Count, Near-DC Ammeter for Custom Instruments	159-162
Paul E Stevenson (<i>Arizona State University</i>); Jennifer Blain Christen (<i>Arizona State University</i>)	

B1L-B: 08:30-10:00	Ambassador A
SPECIAL SESSION: Microfluidics for Biological Analysis (Oral Session)	
Chair: Steve Shih (<i>Concordia University</i>)	
Co-Chair: Sara Mahshid (<i>McGill University</i>)	

8:30	B1L-B.1
Towards High Throughput Electroporation of Zebrafish Follicles	163-166
Azita Saberbgahi (<i>York University</i>); Ebrahim Ghafar-zadeh (<i>York University</i>); Chun Peng (<i>York University</i>)	

9:36	B1L-B.4
A Nanosurface Microfluidic Device for Capture and Detection of Bacteria	167-170
Tamer AbdElFatah (<i>McGill University</i>); Mahsa Jalali (<i>McGill University</i>); Sara Mahshid (<i>McGill University</i>)	

B1P-C: 10:00-17:00	Foyer
Wearable & Consumer Apps for Health & Wellness (Poster Session)	
Chair: Stefan Mozar (<i>Dynexsys</i>)	

Optimal Lead Selection Method to Improve Detection Rate of R-R Interval in Multiple-Lead Electrocardiogram	B1P-C.1 171-174
Shun Sakai (<i>Kumamoto University</i>); Kento Shoji (<i>Kumamoto University</i>); Toshitaka Yamakawa (<i>Kumamoto University</i>); Tadashi Sakata (<i>Kumamoto University</i>); Yuichi Ueda (<i>Kumamoto University</i>)	
Physical Activity Classification Using a Smart Textile	B1P-C.2 175-178
Nour Cherif (<i>Université Lorraine</i>); Youssef Ouakrim (<i>TÉLUQ University</i>); Amel Benazza-Benyahia (<i>Sup'Com</i>); Neila Mezghani (<i>TÉLUQ University</i>)	
Non-Invasive and Flexible Electrodes Based on Multimaterial Fiber for sEMG Signal Detection	B1P-C.3 179-182
Cheikh Latyr Fall (<i>Université Laval</i>); Mourad Roudjane (<i>Université Laval</i>); Sanaz Ghafouri (<i>Université Laval</i>); Quentin Mascaret (<i>Université Laval</i>); Mathieu Biemann (<i>Université Laval</i>); Simon Tam (<i>Université Laval</i>); Jean-Sébastien Roy (<i>Université Laval</i>); Laurent Bouyer (<i>Université Laval</i>); Benoît Gosselin (<i>Université Laval</i>); Younes Messaddeq (<i>Université Laval</i>)	
Design of a Smart IoT-Enabled Walker for Deployable Activity and Gait Monitoring	B1P-C.4 183-186
Satinder Gill (<i>University of New Brunswick</i>); Suraj Nssk (<i>National Institute of Technology, Rourkela</i>); Nitin Seth (<i>University of New Brunswick</i>); Erik Scheme (<i>University of New Brunswick</i>)	

B1P-D: 10:00-17:00	Foyer
Engineering for Life Sciences (Poster Session)	
Chair: Jennifer Blain Christen (<i>Arizona State University</i>)	

Parkinson's Disease Diagnosis Based on Multivariate Deep Features of Speech Signal	B1P-D.1 187-190
Parham Khojasteh (<i>RMIT University</i>); Rekha P M Viswanathan (<i>RMIT University</i>); Behzad Aliahmad (<i>RMIT University</i>); Sanjay Ragnav (<i>Monash Medical Centre</i>); Poonam Zham (<i>RMIT University</i>); Dinesh Kant Kumar (<i>RMIT University</i>)	
A Virtual-Reality System for Interacting with Three-Dimensional Models Using a Haptic Device and a Head-Mounted Display	B1P-D.2 191-194
Elie Saad (<i>McGill University</i>); Robert Funnell (<i>McGill University</i>); Paul Kry (<i>McGill University</i>); Nicole Ventura (<i>McGill University</i>)	
Big Data Integration Case Study for Radiology Data Sources	B1P-D.3 195-198
Priya Deshpande (<i>DePaul University</i>); Alexander Rasin (<i>DePaul University</i>); Eli Brown (<i>DePaul University</i>); Jacob Furst (<i>DePaul University</i>); Daniela S. Raicu (<i>DePaul University</i>); Steven M. Montner (<i>University of Chicago</i>); Samuel G. Armato III (<i>University of Chicago</i>)	
Characterizing Antibody-Microsphere Conjugates for Fluorescence-Based Lateral Flow Immunoassays	B1P-D.4 199-202
Meilin Zhu (<i>Arizona State University</i>); Ching-Wen Hou (<i>Arizona State University</i>); Uwadiae Obahiagbon (<i>Arizona State University</i>); Karen S. Anderson (<i>Arizona State University</i>); Jennifer Blain Christen (<i>Arizona State University</i>)	
Radiomics Analysis of Subcortical Brain Regions Related to Alzheimer Disease	B1P-D.5 203-206
Ahmad Chaddad (<i>McGill university and ETS</i>); Tamim Niazi (<i>McGill University</i>)	

A Nanosurface Microfluidic Device for Capture and Detection of Bacteria	B1P-D.6 207-210
Tamer AbdElFatah (<i>McGill University</i>); Mahsa Jalali (<i>McGill University</i>); Sara Mahshid (<i>McGill University</i>)	

B1P-E: 10:00-17:00	Foyer
Rehabilitation & Assistive Technologies (Poster Session)	
Chair: Laurent Bouyer (<i>Laval University</i>)	

A Basic Test of Calibration Methods for Measurement of Three-Dimensional Movements of Lower Limbs with Inertial Sensors	B1P-E.1 211-214
Takuma Ando (<i>Tohoku University</i>); Takashi Watanabe (<i>Tohoku University</i>)	

Neural Excitations by the Current Injected through the Carbon Nanotube Surface of an Intracortical Electrode In Vivo	B1P-E.2 215-218
Rira Ota (<i>Osaka University</i>); Shohei Suga (<i>Osaka University</i>); Yuki Hayashida (<i>Osaka University</i>)	

A Wearable Electronic Swim Coach for Blind Athletes	B1P-E.3 219-222
Jonathan Oommen (<i>Carleton University</i>); David Bews (<i>Carleton University</i>); Mohsen Sheikh Hassani (<i>Carleton University</i>); Yuu Ono (<i>Carleton University</i>); James R. Green (<i>Carleton University</i>)	

EMG Asymmetry Index in Cyclic Movements - Validation on a Population of Patients with Knee Megaprosthesis	B1P-E.4 223-226
Cristina Castagneri (<i>Politecnico di Torino</i>); Valentina Agostini (<i>Politecnico di Torino</i>); Gabriella Balestra (<i>Politecnico di Torino</i>); Marco Knaflitz (<i>Politecnico di Torino</i>); Marina Carlone (<i>University Hospital Città della Salute e della Scienza di Torino</i>); Giuseppe Massazza (<i>University of Turin</i>)	

The Effect of Signal-to-Noise Ratio on Muscle Synergy Extraction	B1P-E.5 227-230
Marco Ghislieri (<i>Politecnico di Torino</i>); Valentina Agostini (<i>Politecnico di Torino</i>); Marco Knaflitz (<i>Politecnico di Torino</i>)	

Improving Performance of Pattern Recognition-Based Myoelectric Control Using a Desktop Robotic Arm Training Tool	B1P-E.6 231-234
James Austin (<i>University of Alberta</i>); Ahmed Shehata (<i>University of Alberta</i>); Michael Dawson (<i>University of Alberta</i>); Jason Carey (<i>University of Alberta</i>); Jacqueline Hebert (<i>University of Alberta</i>)	

Analog-Like Control Is Possible in SSVEP Based Brain-Computer Interfaces	B1P-E.7 235-238
Luigi Bianchi (<i>Tor Vergata University of Rome</i>); Raffaele Ferrante (<i>Tor Vergata University of Rome</i>); Lucia Rita Quitadamo (<i>Aston Brain Centre</i>)	

Kinematic Data Clustering for Healthy Knee Gait Characterization	B1P-E.9 239-242
Fatma Zgolli (<i>ENET'Com</i>); Khadidaja Henni (<i>TÉLUQ University</i>); Rim Haddad (<i>Sup'Com</i>); Amar Mitiche (<i>INRS-EMT</i>); Youssef Ouakrim (<i>TÉLUQ University</i>); Nicola Hagemester (<i>École de Technologie Supérieure</i>); Pascal-André Vendittoli (<i>Centre de recherche Hôpital Maisonneuve-Rosemont</i>); Aleandre Fuentes (<i>EMOVI</i>); Neila Mezghani (<i>TÉLUQ University</i>)	

Selection of Motor Imageries for Brain-Computer Interfaces Based on Partial Kullback-Leibler Information Measure	B1P-E.10 243-246
Taro Shibanoki (<i>Ibaraki University</i>); Yuki Koizumi (<i>Ibaraki University</i>); Bi Adriel Jr. Yozan (<i>Ibaraki University</i>); Toshio Tsuji (<i>Hiroshima University</i>)	

B1P-F: 10:00-17:00		Foyer
Extreme Environment Medicine (Poster Session)		
Chair: Tobias Cibis (<i>MAD Lab, Friedrich Alexander Universität Erlangen</i>)		
		B1P-F.1
Investigation of Adaptation Mechanisms During Five-Day Dry Immersion Utilizing Big-Data Analytics	247-250	
Anastasiia Prysyazhnyuk (<i>University of Ontario Institute of Technology</i>); Carolyn McGregor (<i>University of Ontario Institute of Technology</i>); Evgenii Bersenev (<i>Institute of Biomedical Problems RAS</i>); Aleksei Slonov (<i>Institute of Biomedical Problems RAS</i>)		
		B1P-F.2
Countermeasure Data Integration Within Autonomous Space Medicine: An Extension to Artemis in Space	251-254	
Jennifer Yeung (<i>University of Ontario Institute of Technology</i>); Carolyn McGregor (<i>University of Ontario Institute of Technology</i>)		
B4L-A: 13:30-15:00		Ambassador C
Wearable & Consumer Apps for Health & Wellness (Oral Session)		
Chair: Carolyn McGregor (<i>University of Ontario Institute of Technology</i>)		
Co-Chair: Stefan Mozar (<i>Dynexsys</i>)		
13:30		B4L-A.1
On the Use of Ultra Wideband Radar and Stacked LSTM-RNN for at Home Fall Detection	255-258	
Hamidreza Sadreazami (<i>University of Ottawa</i>); Miodrag Bolic (<i>University of Ottawa</i>); Sreeraman Rajan (<i>Carleton University</i>)		
14:24		B4L-A.4
The Use of Heart Rate for the Assessment of Firefighter Resilience: A Literature Review	259-262	
Khyati Vyas (<i>University of Ontario Institute of Technology</i>); Carolyn McGregor (<i>University of Ontario Institute of Technology and University of Technology Sydney</i>)		
B4L-B: 13:30-15:00		Ambassador A
SPECIAL SESSION: EMG Sensing & Signal Processing (Oral Session)		
Chair: Erik Scheme (<i>University of New Brunswick</i>)		
Co-Chair: Benoît Gosselin (<i>Laval University</i>)		
13:48		B4L-B.2
Novel Features for EMG Pattern Recognition Based on Higher Order Crossings	263-266	
Angkoon Phinyomark (<i>University of New Brunswick</i>); Erik Scheme (<i>University of New Brunswick</i>)		
14:24		B4L-B.4
Analysis of Muscle's Electrical Activity During Dynamic Fatiguing Exercise Using Visibility Graph and Degree Statistics	267-270	
Navaneethakrishna Makaram (<i>Indian Institute of Technology Madras</i>); Ramakrishnan Swaminathan (<i>Indian Institute of Technology Madras</i>)		
14:42		B4L-B.5
Multifractal Analysis of Term and Preterm Uterine EMG Signals Using Wavelet Leaders	271-274	
Vardhini Padmanabhan (<i>Indian Institute of Technology Madras</i>); Punitha Namadurai (<i>Indian Institute of Technology Madras</i>); Navaneethakrishna Makaram (<i>Indian Institute of Technology Madras</i>); Ramakrishnan Swaminathan (<i>Indian Institute of Technology Madras</i>)		

B5L-A: 15:30-17:00	Ambassador C
Rehabilitation & Assistive Technologies (Oral Session)	
Chair: Bruce Wheeler (<i>University of Florida</i>)	
Co-Chair: Marina Martinez (<i>Université de Montréal</i>)	

15:48	B5L-A.2
Muscle Activity Distribution Features Extracted from HD sEMG to Perform Forearm Pattern Recognition	275-278
François Nougrou (<i>Université du Québec à Trois-Rivières</i>); Alexandre Campeau-Lecours (<i>Université Laval</i>); Md. Rabiul Islam (<i>Université du Québec à Trois-Rivières</i>); Daniel Massicotte (<i>Université du Québec à Trois-Rivières</i>); Benoît Gosselin (<i>Université Laval</i>)	
16:06	B5L-A.3
Preprocessing and Normalization of 3D-Skeleton-Data for Human Motion Recognition	279-282
Jan Paul Vox (<i>Jade University of Applied Sciences</i>); Frank Wallhoff (<i>Jade University of Applied Sciences</i>)	
16:24	B5L-A.4
Development and Verification of a Low-Cost Prosthetic Knee Motion Sensor	283-286
McNiel-Inyani Keri (<i>University of Alberta</i>); Ahmed Shehata (<i>University of Alberta</i>); Quinn Boser (<i>University of Alberta</i>); Albert Vette (<i>University of Alberta</i>); Jacqueline Hebert (<i>University of Alberta</i>)	

B5L-B: 15:30-17:00	Ambassador A
SPECIAL SESSION: Hybrid Microfluidic, Microelectronic and/or Microwave Technologies for Life Science (Oral Session)	
Chair: Ebrahim Ghafar-Zadeh (<i>York University</i>)	
Co-Chair: Mohammad Zarifi (<i>University of British Columbia</i>)	

15:30	B5L-B.1
Highly Selective Conductometric Sensors with Metallic Nanoclusters for Detection of Hg²⁺Ions in Water	287-290
Falah Awwad (<i>United Arab Emirates University</i>)	
15:52	B5L-B.2
Fully-Integrated, High-Efficiency, Multi-Output Charge Pump for High-Density Microstimulators	291-294
Amin Rashidi (<i>Aarhus University</i>); Niloofar Yazdani (<i>Aarhus University</i>); Amir Sodagar (<i>York University</i>)	
16:14	B5L-B.3
Towards Label-Free Platform for Monitoring Interaction Between Cells and Superparamagnetic Iron Oxide Nanoparticles	295-298
Sonia Abad Tan (<i>York University</i>); Ebrahim Ghafar-Zadeh (<i>York University</i>); Georg Zoidl (<i>York University</i>)	
16:36	B5L-B.4
A High-Speed Embedded Event Detector for Mobile DNA Sequencing	299-302
Robinson Mittmann (<i>York University</i>); Sebastian Magierowski (<i>York University</i>); Ahmed Refaey (<i>Manhattan College</i>); Ebrahim Ghafar-Zadeh (<i>York University</i>)	