

COFFEE BREAK & POSTERS SESSION (CONTINUED)

CIST 120 - Performance Analysis of BetaRED-AQM algorithms with multiple TCP and UDP flows

Presenter: Angel Giménez, Universidad Miguel Hernández de Elche, Spain

MVML 108 - NLP-based Traffic Scene Retrieval via Representation Learning

Presenter: Tousef Sadiq, University of Agder, Norway

MVML 112 - Deep Learning Models for Wheat Diseases Detection and Recognition

Presenter: Chekir Amira, Université des sciences et de la technologie Houari Boumediene, Algeria

ROOM 1 - ARTIFICIAL INTELLIGENCE I 11:00 AM - 12:00 PM

Session Chair: Dr. Luigi Benedicenti, University of New Brunswick, Canada

11:00 - 11:15, MVML 114 - What Does A Typical CNN "See" In An Emotional Facial Image?

Presenter: Mathy Vandhana Sannasi, University of Reading, UK

11:15 - 11:30, MVML 111 - A Mitosis Detection and Classification Methodology with YOLOv5 and Fuzzy Classifiers

Presenter: Refik Samet, Ankara University, Turkey

11:30 - 11:45, MVML 113 - Logistics Box Recognition in Robotic De-Palletizing System with Combination of Cycle-GAN and Mask-RCNN

Presenter: Jonghun Yoon, Hanyang University, South Korea

11:45 - 12:00, MVML 107 - An Artificial Intelligence Based Defect Detection System for Transparent Substrate

Presenter: Cih-Kuang Lin, National Central University, Taiwan

12:00 PM - 01:00 PM - LUNCH BREAK

ROOM 1 - KEYNOTE LECTURE 01:00 PM - 01:45 PM

MHCI 2023 VIRTUAL

Blending the Physical and the Virtual: Multi-Modal Human-Computer Interaction for Music

Dr. George Tzanetakis, University of Victoria, Canada

ROOM 1 - KEYNOTE LECTURE 01:45 PM - 02:30 PM

MHCI 2023 VIRTUAL

Artist Live Multimedia Performance Using the Radiodrum HCI

Dr. Peter Driessen, Universiteit Utrecht, Netherlands

ROOM 1 - BIOMEDICAL DEVICES II 2:30 PM - 03:00 PM

Session Chair: Dr. Maysam Abbod, Brunel University London, UK

02:30 - 02:45, ICBES 120 - Evaluation of a low-end VR setup for CROM assessment

Presenter: Jose Angel Santos Paz, Universidad San Pablo-CEU, Spain

02:45 - 03:00, ICBES 144 - Effects of Tapered-Strut Design on Corrosion Resistance for Biodegradable Magnesium Stents

Presenter: Li-Han Lin, National Taiwan University, Taiwan

03:00 - 03:15, ICBES 153 - Accuracy, Flexural Strength, and Surface Roughness of Interim Fixed Crowns Materials After the Accelerated Aging Process and Printed by Different 3D Printing Systems

Presenter: Omar Alageel, King Saud University, KSA

03:00 PM - 03:20 PM - COFFEE BREAK

ROOM 1 - ARTIFICIAL INTELLIGENCE II 03:20 PM - 04:05 PM

Session Chair: Dr. Luigi Benedicenti, University of New Brunswick, Canada

03:20 - 03:35, MVML 120 - Automatic Detection of Honey in Hive Frames using Deep Learning

Presenter: Abigail Paradise Vit, Yarden Aronson, The Max Stern Emek Yezreel College, Israel

03:35 - 03:50, MHCI 111 - GAN-Based Fine-Grained Feature Modeling For Zero-Shot Voice Cloning

Presenter: Jie Zhu, Shanghai Jiao Tong University, China

03:50 - 04:05, MHCI 104 - Designing an Inclusive Activity Mediated By Technology and Performative Arts

Presenter: Chiara Gulino, Francesca Fiore, University of Trento, Italy

07:00 PM - 09:00 PM - GALA DINNER

Accepted papers may be published in one of these journals after the 2nd peer review process:

- Journal of Machine Intelligence and Data Science (JMIDS)
- Journal of Biomedical Engineering and Biosciences (JBEB)



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EECSS'23 Program



EECSS'23 Proceedings

MACHINE LEARNING FOR ENGINEERS - SHORT COURSE

November 16 -17, 2023



Early-Bird Registration Before August 18, 2023



Will be held virtually



Globally Accessible

Dr. Zheng Liu
University of British Columbia, Canada



Next Congress:

10th World Congress on Electrical Engineering and Computer Systems and Science (EECSS 2024)

Berlin, Germany, August, 2024



EECSS 2023

9TH WORLD CONGRESS ON ELECTRICAL ENGINEERING AND COMPUTER SYSTEMS AND SCIENCE (EECSS 2023)

3 - 5 August, 2023

Brunel University, London, United Kingdom

PROGRAM



EEE²³ 9th International Conference on Electrical Engineering and Electronics (EEE 2023)

CIST²³ 8th International Conference on Computer and Information Science and Technology (CIST 2023)

MHCI²³ 10th International Conference on Multimedia and Human-Computer Interaction (MHCI 2023)

ICBES²³ 10th International Conference on Biomedical Engineering and Systems (ICBES 2023)

MVML²³ 9th International Conference on Machine Vision and Machine Learning (MVML 2023)

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EECSS 2023 CONGRESS CHAIRS:



Dr. Luigi Benedicenti
University of New Brunswick, Canada
Congress Chair



Dr. Zheng Liu
University of British Columbia, Canada
Chongqing Jiaotong University, China
Congress Co-Chair



Dr. Vaclav Skala
University of West Bohemia,
Czech Republic
Congress Local Chair

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DAY 1 (THURSDAY - VIRTUAL) - AUGUST 03, 2023

DAY 2 (FRIDAY) - AUGUST 04, 2023

REGISTRATION - 08:00 AM - 09:00 AM

OFFICIAL OPENING - 09:00 AM - 09:15 AM

Dr. Luigi Benedicenti, University of New Brunswick, Canada

ROOM 1 - KEYNOTE LECTURE - 09:15 AM - 10:00 AM

MVML 2023 PHYSICAL

The importance of Integration of AI, Brain Neuro-Imaging Machine Vision, Peripheral Blood Gene Expressions, and Genomics for Better Prognosis and Diagnosis Predictions of Alzheimer's Disease

Dr. Dalila B. Megherbi, University of Massachusetts Lowell, USA

ROOM 1 - KEYNOTE LECTURE 10:00 AM - 10:45 AM

EEE 2023 VIRTUAL

Space-Based Solar Power: From the Realm of Science Fiction to Reality

Dr. Omar M. Ramahi, University of Waterloo, Canada

10:45 AM - 11:05 AM - COFFEE BREAK

ROOM 1 - BIOMEDICAL ENGINEERING III
11:05 AM- 12:35 PM

Session Chair: Dr. Luigi Benedicenti, University of New Brunswick, Canada

11:05 - 11:20, ICBES 112 - Fluid Movement in Porous Bone via Blood Pressure: A Porous Media Theory

Presenter: Kasra Soleimani, University of Calgary, Canada

11:20 - 11:35, ICBES 119 - Workflow and Clinical Implementation of a Simulation Method for the Analysis of Hemodynamics and Structural Mechanics of Cerebral Aneurysms

Presenter: Jozsef Nagy, Eulerian-Solutions EU, Austria

11:35 - 11:50, ICBES 126 - EEG Channel Selection Method for Subject-Independent Motor Imagery Classification using Shapley Additive exPlanations

Presenter: Vishnupriya R, Indian Institute of Technology Madras, India

11:50 - 12:05, ICBES 162 - Front-end Circuit for Six ECG Precordial Leads, with Signal Processing and Graphic Interface

Presenter: Valentina Bastida, National Autonomous University of Mexico, Mexico

12:05 - 12:20, ICBES 155 - Predicting the COVID-19 Pandemic Spread: An Analysis Using ARX and ARMAX Models

Presenter: Cristina Maria Stancioi, Technical University of Cluj-Napoca, Romania

12:20 - 12:35, ICBES 149 - A Prediction Algorithm for Fall Risk Assessment among Community-dwelling Elderly People

Presenter: Manila Caragiuli, Marche Polytechnic University, Italy

12:35 PM - 12:40 PM - GROUP PHOTO

12:40 PM - 01:40 PM - LUNCH BREAK

ROOM 1 - PLENARY LECTURE - 01:40 PM - 02:25 PM

ICBES 2023 VIRTUAL

Aliphatic Polycarbonate-Based Biomaterials: From Elastic Hydrogels to Viscous Liquids

Dr. Brian Amsden, Queen's University, Canada

ROOM 1 - MACHINE LEARNING & PATTERN RECOGNITION III
02:25 PM - 03:40 PM

Session Chair: Dr. Jozsef Nagy, Eulerian-Solutions E.U, Austria

02:25 - 02:40, CIST 125 - Automatically Enriching Content for a Behavioral Health Learning Management System: a First Look

Presenter: Greg Barish, Alliance Logic, Inc., USA

02:40 - 02:55, CIST 152 - Historical-Domain Pre-trained Language Model for Historical Extractive Text Summarization

Presenter: Lamsiyah Salima, University of Luxembourg, Luxembourg

02:55 - 03:10, CIST 117 - Fine-Tuned PEGASUS: Exploring the Performance of the Transformer-Based Model on a Diverse Text Summarization Dataset

Presenter: Mohammed Alsuhaibani, Qassim University, KSA

03:10 - 03:25, CIST 126 - Constructing and Analysing the MalaySarc Dataset: A Resource for Detecting and Understanding Sarcasm in Malay Language

Presenter: Suziane Haslinda Suhaimi, University of Technology Malaysia, Malaysia

03:25 - 03:40, CIST 122 - The Influence of Subcutaneous Fat Layer on sEMG Signals During Fatiguing Isometric Contractions in Young Males

Presenter: Mohamed R. Al-mulla, Kuwait University, Kuwait

03:40 PM - 04:00 PM - COFFEE BREAK

ROOM 1 - BIOMEDICAL ENGINEERING III 04:00 PM-05:30 PM

Session Chair: Dr. Luigi Benedicenti, University of New Brunswick, Canada

04:00 - 04:15, ICBES 127 - In-Vivo Animal Trial of a Fiber-Optic Pressure Sensor Probe with Distributed Sensing Points for the Diagnosis of Lumbar Spinal Stenosis

Presenter: Marvin Friedemann, Chemnitz University of Technology, Germany

04:15 - 04:30, EEE 101 - Speedup of Extended Kalman Filter due to Gain Elimination

Presenter: Nicholas Assimakis, University of Athens, Greece

04:30 - 04:45, EEE 108 - Feasibility Studies on the Proposed Developments to Be Added in the Existing Network by using ETAP

Presenter: Krishnav Bhatia, Couch Perry and Wilkes India Pvt. Ltd., India

04:45 - 05:00, EEE 112 - A Solar-powered IoT-based Control and Monitoring System for a Smart Bin

Presenter: Munirah Mohammed Aldossary, Prince Mohammad bin Fahd University, KSA

05:00 - 05:15, CIST 118 - Column Generation Methods of Variational Inequalities - An Extension

Presenter: William Chung, City University of Hong Kong, Hong Kong

BIOMEDICAL ENGINEERING III (CONTINUED)

05:15 - 05:30, EEE 113 - Development of an Optofluidic System for Concentration Measurement of Colorimetric based Solution targeted for Water Quality Assessment

Presenter: Mohamad Faizal Abd Rahman, Universiti Teknologi MARA, Malaysia

5:30 - 5:45, CIST 112 - Analyzing Emotional Contagion in Merged and Non-Merged Issues in OSS repositories of GitHub

Presenter: Luigi Benedicenti, University of New Brunswick, Canada

DAY 3 (SATURDAY) - AUGUST 05, 2023

ROOM 1 - KEYNOTE LECTURE 09:00 AM - 09:45 AM

ICBES 2023 PHYSICAL

Rapid DNA Amplification: Recent Approaches to Accelerating Nucleic Acid Diagnostic Methods

Dr. Andrew G. Kirk, McGill University, Canada

ROOM 1 - BIOMEDICAL DEVICES I 09:45 AM - 10:30 AM

Session Chair: Dr. Hao-Ming Hsiao, National Taiwan University, Taiwan

09:45 - 10:00, ICBES 116 - Ultrasonic Blind Stick with GPS Tracking System

Presenter: Maysam Abbod, Brunel University London, UK

10:00 - 10:15, ICBES 128 - Design, Development, and Validation of a Micro-optofluidic Device Able to Measure Drug Release from Drug-loaded Biomaterials

Presenter: William Oates, University of Manchester, UK

10:15 - 10:30, ICBES 151 - Liver Stiffness is Subject to Postural Changes

Presenter: Zihao Huang, The Hong Kong Polytechnic University, China

COFFEE BREAK & POSTERS SESSION 10:30 AM - 11:00 AM

Session Chair: Dr. Maysam Abbod, Brunel University London, UK

ICBES 140 - Classification of Gait Patterns in Young vs Older Adults Using Kinematic Data

Presenter: Victoria Chester, University of New Brunswick, Canada

ICBES 141 - Classification of Gait Patterns in Autism Using Kinematic Data

Presenter: Victoria Chester, University of New Brunswick, Canada

EEE 105 - FS8 Power System Anomaly Protection and Recovery Design

Presenter: Chia Wen Hsu, Satellite Avionics Division, Taiwan Space Agency, Taiwan

MHCI 109 - A Systematic Review of the Predictors, Mediators, and Moderators of the Uncanny Valley Effect in Human-embodied Conversational Agent Interaction

Presenter: Stefania Stefanache, University of Bucharest, Romania

CIST 133 - Artificial Neural Network-Based Process Recommender System for Additive Manufacturing

Presenter: Dong Yong Park, Korea Institute of Industrial Technology, South Korea