19th International Conference on Engineering Applications of Neural Networks – EANN 2018

3-5 September 2018

UWE Bristol

Frenchay Campus, Q Block

Detailed Programme

EANN 2018 - DAY 1	
09:00 – 09:30	REGISTRATION – Room 2Q48
09:30 – 10:00	Opening Session – Room 2Q49 Introductions, Welcome
10:00 – 11:00	Keynote Lecture – Room 2Q49 Professor Chrisina Jayne, Oxford Brookes University, UK “Explainable Artificial Neural Network Models“ Chair: Dr Elias Pimenidis
11:00 – 11:20	Coffee Break – Room 2Q48
11:20 – 13:20	1st Session – Deep Learning Room 2Q49 Chair: Dr Elias Pimenidis Deep Imitation learning with memory for Robocup Soccer Simulation, ***Ahmed Hussein, Eyad Elyan and Chrisina Jayne*** Face Detection for Crowd Analysis using Deep Convolutional Neural Networks, ***Bryan Kneis*** RR-FCN: Rotational Region-based Fully Convolutional Networks for Object Detection, ***Dingqian Zhang, Hui Zhang, Haichang Li and Xiaohui Hu*** Toward Video Tampering Exposure: Inferring Compression Parameters from Pixels, ***Pamela Johnston, Eyad Elyan and Chrisina Jayne***
13:20 – 14:00	Lunch – Room 2Q48
14:00 – 15:30	2nd Session – Recurrent NN and Spiking NN 1 Room 2Q49 Chair: Dr Steve Battle Recurrent Auto-Encoder Model for Large-Scale Industrial Sensor Signal Analysis, ***Timothy Wong and Zhiyuan Luo***

	Recurrent Neural Networks for Prediction of Exacerbations of Patients with Chronic Obstructive Pulmonary Disease, ***Vimala Nunavath, Morten Goodwin, Jahn Thomas Fidjeand and Carl Erik Moe*** Probabilistic Word Association for Dialogue Act Classification with Recurrent Neural Networks, ***Nathan Duran and Steve Battle***
15:30 -16:00	Coffee Break – Room 2Q48
16:00 - 17:30	3rd Session – Extreme Learning Machine / Machine Learning Applications - 1 Room 2Q49 Chair: Professor Doina Logofatu Smoothing Regularized Extreme Learning Machine, ***Qin-Wei Fan, Xing-Shi He and Xin-She Yang*** Neuroevolution of Actively Controlled Virtual Characters - An Experiment for an Eight-legged Character, ***Svein Inge Albrigsten, Alexander Imenes, Morten Goodwin, Lei Jiao and Vimala Nunavath*** Machine Learning With Pong Game: A Case Study, ***Benedikt Nork, Robert Uwe Litschel, Lengert Geraldine Denise, Nasim Ahmad, Thuan Gia Lam and Doina Logofatu***
19:30 – 21:30	Conference Reception at the Riverstation Bar https://www.riverstation.co.uk/

EANN 2018 - DAY 2	
09:30 – 10:00	REGISTRATION – Room 2Q48
10:00 – 11:00	Keynote Lecture – Room 2Q49 Professor Plamen Angelov, Lancaster University, UK “Empirical Approach: How to get Fast, Interpretable Deep Learning “ Chair: Professor Chrisina Jayne
11:00 – 11:30	Coffee Break – Room 2Q48
11:30 – 13:00	4th Session – Predictive Models and Fuzzy Logic Room 2Q49 Chair: Dr Antisthenis Tsompanas Model Prediction of Defects in Sheet Metal Forming Processes, ***Mario Dib, Bernardete Ribeiro and Pedro Prates*** Myo-To-Speech - Evolving Fuzzy-Neural Network Prediction of Speech Utterances from Myoelectric Signals, ***Mario Malcangi, Giovanni Felisati, Alberto Saibene, Enrico Alfonsi, Mauro Fresia, Roberto Maffioletti and Hao Quan*** Selecting Display Products for Furniture Stores Using Fuzzy Multi-Criteria Decision Making Techniques, ***Ozer Uygun, Ilker Guven, Fuat Simsir and Mehmet Emin Aydin***
13:00 – 14:00	Lunch – Room 2Q48
14:00 – 16:30	5th Session (including coffee break) Room 2Q49 Chair: Professor Praminda Caleb-Solly Extreme Learning Machine / Machine Learning Applications – 2

	Network Intrusion Detection on Apache Spark with Machine Learning Algorithms, ***Elif Merve Kurt and Yaşar Becerikli*** Managing Congestion in Vehicular Networks Using Tabu Search, ***Muhammad Ishaq, Mazhar Hussain Malik and Mehmet Emin Aydin*** Activity recognition Structured inference networks using high-dimensional sensors for surveillance purposes, ***Vincent Polfliet, Nicolas Knudde, Baptist Vandersmissen, Ivo Couckuyt and Tom Dhaene*** A Framework for Semi-Supervised Adaptive Learning for Activity Recognition in Healthcare Applications, ***Prankit Gupta and Praminda Caleb-Solly***
17:30 – 19:30	Boat Trip in the Bristol Harbour area on the Silver Salmon
20:00 – 22:00	Conference Dinner at the Riverstation Restaurant https://www.riverstation.co.uk/

EANN 2018 - DAY 3	
09:30 – 10:30	6TH Session - Room 2Q46 Recurrent NN and Spiking NN - 2 Chair: Dr Nikolaos Polatidis Acceleration of Convolutional Networks using Nanoscale Memristive Devices, ***Shruti R. Kulkarni, Anakha V. Babu and Bipin Rajendran*** Comparison of Asymmetric and Symmetric Neural Networks with Gabor Filters, ***Naohiro Ishii, Toshinori Deguchi, Masashi Kawaguchi and Hiroshi Sasaki***
10:30 – 11:30	Keynote Lecture - Room 2Q49 Professor Anthony Pipe, Bristol Robotics Laboratory. **"Safe and Useful Human-Robot Interaction: from Connected Autonomous Vehicles to Care Robotics"** Chair: Professor Ngoc Thanh Nguyen
11:30 – 11:50	Coffee Break – Room 2Q48
11:50 – 13:00	Final Session – Recommender Systems Room 2Q46 Chair: Dr Elias Pimenidis A Triangle Multi-Level Item-Based Collaborative Filtering Method That Improves Recommendations, ***Gharbi Alshammari, Stelios Kapetanakis, Nikolaos Polatidis and Miltos Petridis*** Reproduction of experiments in recommender systems evaluation based on explanations, ***Nikolaos Polatidis and Elias Pimenidis*** Close of Conference and information on EANN 2019
13:00 – 14:00	Lunch – Room 2Q50/51