computing
conference 2020

Thursday, July 16

GENERAL SESSION

🕐 1:00 PM - 2:00 PM (BST/UTC+1)

Opening Session

KEYNOTE TALKS

🕐 2:00 PM - 2:45 PM (BST/UTC+1)

Keynote Talk - Vinton G. Cerf, Google

PAPER PRESENTATIONS

🕐 2:45 PM - 4:30 PM (BST/UTC+1)

Session 1 - Computing
Session 2 - Artificial Intelligence
Session 3 - Smart Healthcare
Session 4 - Natural Language Processing

KEYNOTE TALKS

🕐 4:30 PM - 5:15 PM (BST/UTC+1)

Keynote Talk - René Mayrhofer, Johannes Kepler University (JKU)

POSTERS	**ROUNDTABLES**
🕐 5:15 PM - 5:45 PM (BST/UTC+1)	🕐 5:15 PM - 5:45 PM (BST/UTC+1)
Poster Presentations	Virtual Roundtables

PAPER PRESENTATIONS

🕐 5:45 PM - 7:45 PM (BST/UTC+1)

Session 5 - Computing
Session 6 - Artificial Intelligence
Session 7 - Security
Session 8 - Deep Learning

GENERAL SESSION

🕐 7:45 PM - 8:30 PM (BST/UTC+1)

Mindfulness and Yoga

Friday, July 17

KEYNOTE TALKS

🕐 12:00 PM - 12:45 PM (BST/UTC+1)

Keynote Talk - Amir H. Gandomi, University of Technology Sydney

PAPER PRESENTATIONS

🕐 12:45 PM - 2:15 PM (BST/UTC+1)

Session 9 - Social Computing
Session 10 - Image Processing
Session 11 - Internet of Things
Session 12 - e-Learning

POSTERS	**ROUNDTABLES**
🕐 2:15 PM - 2:45 PM (BST/UTC+1)	🕐 2:15 PM - 2:45 PM (BST/UTC+1)
Poster Presentations	Virtual Roundtables

PAPER PRESENTATIONS

🕐 2:45 PM - 4:30 PM (BST/UTC+1)

Session 13 - Machine Vision
Session 14 - Data Science
Session 15 - Security
Session 16 - Technology Trends

KEYNOTE TALKS

🕐 4:30 PM - 5:15 PM (BST/UTC+1)

Keynote Talk - Benedict du Boulay, University of Sussex

ROUNDTABLES

🕐 5:15 PM - 5:45 PM (BST/UTC+1)

Virtual Roundtables

PAPER PRESENTATIONS

🕐 5:45 PM - 7:45 PM (BST/UTC+1)

Session 17 - Neural Networks
Session 18 - Data Science
Session 19 - Security
Session 20 - Communication

GENERAL SESSION

🕐 7:45 PM - 8:30 PM (BST/UTC+1)

Happy Hour!

SESSION 1 - COMPUTING	SESSION 2 - ARTIFICIAL INTELLIGENCE	SESSION 3 - SMART HEALTHCARE	SESSION 4 - NLP
146 - A Heuristic for Efficient Reduction in Hidden Layer Combinations for Feedforward Neural Networks (Presenter: Wei Hao Khoong)	56 - A Teaching-Learning-based Optimization with Modified Learning Phases for Continuous Optimization (Presenter: Wei Hong Lim)	136 - A Weighted Combination Method of Multiple K-Nearest Neighbor Classifiers for EEG-based Cognitive Task Classification (Presenter: Abduljalil Mohamed)	404 - The Emergence, Advancement and Future of Textual Answer Triggering (Presenter: Kingsley Acheampong)
291 - FERA: A Framework for Critical Assessment of Execution Monitoring based Approaches for Finding Concurrency Bugs (Presenter: Jasmin Jahic)	387 - A Q-Learning based Maximum Power Point Tracking for PV Array under Partial Shading Condition (Presenter: Roy Chaoming Hsu)	117 - Analysis and Detection of Brain Tumor using U-Net-based Deep Learning (Presenter: Mayank Dave)	435 - The Method of Analysis of Data from Social Networks using Rapidminer (Presenter: Askar Boranbayev)
173 - Traceability Framework for Requirement Artefacts (Presenter: Foziah Gazzawe)	351 - Warehouse Setup Problem in Logistics: A Truck Transportation Cost Model (Presenter: Dharemender Singh Kushwaha)	322 - Implementation of Deep Neural Networks in Facial Emotion Perception in Patients Suffering from Depressive Disorder: Promising Tool in the Diagnostic Process and Treatment Evaluation (Presenter: Krzysztof Michalik)	388 - Improvement of Automatic Extraction of Inventive Information with Patent Claims Structure Recognition (Presenter: Daria Berdyugina)
122 - A Flexible Hybrid Approach to Data Replication in Distributed Systems (Presenter: Syed Mohtashim Abbas Bokhari)	455 - Learning the Satisfiability of - clausal Forms (Presenter: Mohamed El Halaby)	53- Regression Analysis of Brain Biomechanics under Uniaxial Deformation (Presenter: Osama Abuomar)	423 - Authorship Identification for Arabic Texts using Logistic Model Tree Classification (Presenter: Safaa Hriez)
133 - Haptic Data Accelerated Prediction via Multicore Implementation (Presenter: Andrea Formisano)	46 - Skin Capacitive Imaging Analysis using Deep Learning GoogLeNet (Presenter: Perry Xiao)	62 - DiaTTroD: A Logical Agent Diagnostic Test for Tropical Diseases (Presenter: Sandra Mae Famador)	106 - OCR Post Processing using Support Vector Machines (Presenter: Kazem Taghva)
281 - Comparison of Embedded Linux Development Tools for the WiiPiiDo Distribution Development (Presenter: Diogo Duarte)	124 - Non-linear Aggregation of Filters to Improve Image Denoising (Presenter: Juliette Rengot, Benjamin Guedj)	178 - Detection and Localization of Breast Tumor in 2D using Microwave Imaging (Presenter: Abdelfettah Miraoui)	406 - Translate Japanese into Formal Languages with an Enhanced Generalization Algorithm (Presenter: Kazuaki Kashihara)
103 - A Top-down Three-way Merge Algorithm for HTML/XML Documents (Presenter: Anastasios Bakaoukas)	230 - Probabilistic Inference using Generators: The Statues Algorithm (Presenter: Pierre Denis)	203 - Exudate-based Classification for Detection of Severity of Diabetic Macula Edema (Presenter: Nandana Prabhu)	378 - Women in ISIS Propaganda: A Natural Language Processing Analysis of Topics and Emotions in a Comparison with a Mainstream Religious Group (Presenter: Donald Brown)
			275 - Rethinking Our Assumptions about Language Model Evaluation (Presenter: Nancy Fulda)

SESSION 5 - COMPUTING	SESSION 6 - ARTIFICIAL INTELLIGENCE	SESSION 7 - SECURITY	SESSION 8 - DEEP LEARNING
21 - Recommendations for Effective Security Assurance of Software-Dependent Systems (Presenter: Jason Jaskolka)	95 - Use of Artificial Intelligence and Machine Learning for Personalization Improvement in Developed e-Material Formatting Application (Presenter: Kristine Mackare, Anita Jansone)	204 - SADDLE: Secure Aerial Data Delivery with Lightweight Encryption (Presenter: Ahmad Salman)	75 - Improving Gate Decision Making Rationality with Machine Learning (Presenter: Mark van der Pas)
112 - Demonstrating Advanced Machine Learning and Neuromorphic Computing using IBM's Ns16e (Presenter: Mark Barnell)	70 - An Adaptive Genetic Algorithm Approach for Optimizing Feature Weights in Multimodal Clustering (Presenter: Manar Hosny)	259 - Towards an Intelligent Intrusion Detection System: A Proposed Framework (Presenter: Jalal Omer Atoum)	255 - End-to-End Memory Networks: A Survey (Presenter: Raheleh Jafari)
208 - Performance Evaluation of MPI vs. Apache Spark for Condition based Maintenance Data (Presenter: Tomasz Haupt)	366 - A Logic-based Agent Modelling Paradigm for Investment in Derivatives Markets (Presenter: Jonathan Waller)	396 - An Integrated Safe and Secure Approach for Authentication and Secret Key Establishment in Automotive Cyber-Physical Systems (Presenter: Arslan Munir)	135 - MESRS: Models Ensemble Speech Recognition System (Presenter: Ben Zagagy)
77 - wiseCIO: Web-based Intelligent Services Engaging Cloud Intelligence Outlet (Presenter: Sheldon Liang)	401 - Jupyter-Notebook: A Digital Signal Processing Course Enriched Through the Octave Programming Language (Presenter: Carlos Aviles-Cruz)	51 - Spoofed/Unintentional Fingerprint Detection using Behavioral Biometric Features (Presenter: Ammar Salman)	120 - Reduced Order Modeling Assisted By Convolutional Neural Network for Thermal Problems with Nonparametrized Geometrical Variability (Presenter: Fabien Casenave)
157 - Numerical Method of Synthesized Control for Solution of the Optimal Control Problem (Presenter: Askhat Diveev)	63 - Urban Mobility Swarms: A Scalable Implementation (Presenter: Alex Berke)	47 - Windows 10 Hibernation File Forensics (Presenter: Ahmad Ghafarian)	116 - Deep Convolutional Generative Adversarial Networks Applied to 2D Incompressible and Unsteady Fluid Flows (Presenter: Nissrine Akkari, David Ryckelynck)
158 - Energy Efficient Resource Utilization: Architecture for Enterprise Network : Towards Reliability with Sleep Alert (Presenter: Dilawar Ali)	138 - Using AI Simulations to Dynamically Model Multi-Agent Multi-Team Energy Systems (Presenter: D. Michael Franklin)	105 - Extended Protocol using Keyless Encryption based on Memristors (Presenter: Yuxuan Zhu)	302 - DeepConAD: Deep and Confidence Prediction for Unsupervised Anomaly Detection in Time Series (Presenter: Ahmad Idris Tambuwal)
40 - Finding the Maximal Independent Sets of a Graph Including the Maximum using a Multivariable Continuous Polynomial Objective Optimization Formulation (Presenter: Maher Heal)	467 - Random Sampling Effects on e-Learners Cluster Sizes using Clustering Algorithms (Presenter: Muna Al Fanah)	266 - Software Implementation of a SRAM PUF-based Password Manager (Presenter: Sareh Assiri)	50 - Extending CNN Classification Capabilities using a Novel Feature to Image Transformation (FIT) Algorithm (Presenter: Ammar Salman)
395 - Multidatabase Location Based Services (MLBS) (Presenter: Romani Ibrahim)	304 - Decomposition based Multi-Objectives Evolutionary Algorithms Challenges and Circumvention (Presenter: Sherin Omran)	78 - Enabling Paratransit and TNC Services with Blockchain based Smart Contracts (Presenter: Amari Lewis)	431 - Enhancing Credit Card Fraud Detection using Deep Neural Network (Presenter: Jalila Zouhair)

SESSION 9 - SOCIAL COMPUTING	SESSION 10 - IMAGE PROCESSING	SESSION 11 - INTERNET OF THINGS	SESSION 12 - E-LEARNING
52 – Is Social Media Still "Social"? (Presenter: Chan Eang Teng)	346 – A Neural Markovian Multiresolution Image Labeling Algorithm (Presenter: John Mashford)	376 – Emotional Effect of Multimodal Sense Interaction in a Virtual Reality Space using Wearable Technology (Presenter: Jiyoung Kang)	452 – Conceptualizing Technology-Enhanced Learning Constructs: A Journey of Seeking Knowledge using Literature-Based Discovery (Presenter: Amalia Rahmah)
54 – Social Media: Influences and Impacts on Culture (Presenter: Mui Joo Tang)	324 – A Raspberry Pi-based Identity Verification through Face Recognition using Constrained Images (Presenter: Alvin Jason Virata)	96 – Addressing Copycat Attacks in IPv6-based Low Power and Lossy Networks (Presenter: Virender Ranga)	283 – Injecting Challenge or Competition in a Learning Activity for Kindergarten/Primary School Students (Presenter: Bah Tee Eng)
310 – Social Engineering Defense Mechanisms: A Taxonomy and a Survey of Employees' Awareness Level (Presenter: Amelia Regan)	185 – Comparative Study of Classifiers for Blurred Images (Presenter: Ratiba Gueraichi)	18 – IoT based Cloud-Integrated Smart Parking with e-Payment Service (Presenter: Effariza Hanafi)	113 – A Novel Yardstick of Learning Time Spent in a Programming Language by Unpacking Bloom's Taxonomy (Presenter: Alcides Bernardo Tello)
408 – Smart Cities: Using Gamification and Emotion Detection to Improve Citizens Well Fair and Commitment (Presenter: Sergio Gonçalves)	312 – Development of a Hardware-Software System for the Assembled Helicopter-Type UAV Prototype by Applying Optimal Classification and Pattern Recognition Methods (Presenter: Askar Boranbayev)	73 – An Internet of Things and Blockchain based Smart Campus Architecture (Presenter: Manal Alkhammash)	248 – A Comparative Study of Active and Passive Learning Approaches in Hybrid Learning, Undergraduate, Educational Programs (Presenter: Khalid Baba)
129 – Towards a Smart Interface-based Automated Learning Environment Through Social Media for Disaster Management and Smart Education Disaster (Presenter: Zair Bouzidi)	254 – A-Type Phased Array Ultrasonic Imaging Testing Method based on FRI Sampling (Presenter: Guangzhi Dai, Xiaojun Wen)	192 – On the Analysis of Semantic Denial-of-Service Attacks Affecting Smart Living Devices (Presenter: Joseph Bugeja)	299 – Mobile Learning Adoption at a Science Museum (Presenter: Ruel Welch)
270 – Cost of Dietary Data Acquisition with Smart Group Catering (Presenter: Weiqiang Sun)	33 – An Improved Omega-K SAR Imaging Algorithm based on Sparse Signal Recovery (Presenter: Huaping Xu)	128 – Towards a Scalable IOTA Tangle-based Distributed Intelligence Approach for the Internet of Things (Presenter: Tariq Alsboui)	436 – Assessing and Development of Chemical Intelligence Through e-Learning Tools (Presenter: Elena Volkova)

SESSION 13 - MACHINE VISION	SESSION 14 - DATA SCIENCE	SESSION 15 - SECURITY	SESSION 16 - TECHNOLOGY TRENDS
400 - Identification and Classification of Botrytis Disease in Pomegranate with Machine Learning (Presenter: Maria Sanchez)	108 - A Hybrid Recommender System Combing Singular Value Decomposition and Linear Mixed Model (Presenter: Tianyu Zuo)	119 - Behavior and Biometrics based Masquerade Detection Mobile Application (Presenter: Sammani Y. Rajapaksha)	421 - A Comprehensive Survey and Analysis on Path Planning Algorithms and Heuristic Functions (Presenter: Yong Yue)
340 - Boundary Detection of Point Clouds on the Images of Low-Resolution Cameras for the Autonomous Car Problem (Presenter: Istvan Elek)	87 - Personalized Recommender Systems with Multi-source Data (Presenter: Yili Wang, Tong Wu)	225 - Immune-based Network Dynamic Risk Control Strategy Knowledge Ontology Construction (Presenter: Meng Huang)	179 - Fuzzy Logic based Adaptive Innovation Model (Presenter: Bushra Naeem)
420 - Comparison of Dimensionality Reduction Methods for Road Surface Identification System (Presenter: Addisson Salazar)	419 - Fraud Detection using Sequential Patterns from Credit Card Operations (Presenter: Addisson Salazar)	200 - On Generating Cancelable Biometric Templates using Visual Secret Sharing (Presenter: Nitin Kumar)	98 - Pilot Study of ICT Compliance Index Model to Measure the Readiness of Information System (IS) at Public Sector in Malaysia (Presenter: Aziz Deraman)
273 - Genetic Algorithms as a Feature Selection Tool in Heart Failure Disease (Presenter: Asmaa Alabed)	424 - Retention Prediction in Sandbox Games with Bipartite Tensor Factorization (Presenter: Anders Drachen)	413 - Memory Incentive Provenance (MIP) to Secure the Wireless Sensor Data Stream (Presenter: Mohammad Amanul Islam)	290 - Prediction of Cumulative Grade Point Average: A Case Study (Presenter: Mahady Hasan)
425 - WARDS: Modelling the Worth of Vision in MOBA's (Presenter: Alan Pedrassoli Chitayat)	91 - Renormalization Approach to the Task of Determining the Number of Topics in Topic Modeling (Presenter: Vera Ignatenko)	345 - LockChain Technology as One Source of Truth for Cyber, Information Security and Privacy (Presenter: Yuri Bobbert, Nese Ozkanli)	274 - How Information System Project Stakeholders Perceive Project Success (Presenter: Iwona Kolasa)
271 - A Machine Learning Platform in Healthcare with Actor Model Approach (Presenter: Mauro Mazzei)	201 - Modelling the Currency Exchange Rates using Support Vector Regression (Presenter: Sadik Ulker)	326 - Enhanced Security using Elasticsearch and Machine Learning (Presenter: Mihai Carabas)	269 - A Review of Age Estimation Research to Evaluate its Inclusion in Automated Child Pornography Detection (Presenter: Lee MacLeod)
409 - Application of Additional Argument Method to Burgers Type Equation with Integral Term (Presenter: Taalaibek Imanaliev)	442 - Data Analytics of Student Learning Outcomes using Abet Course Files (Presenter: Hosam Alhakami, Tahani Alsubait)	289 - Exploiting Linearity in White-Box AES with Differential Computation Analysis (Presenter: Jakub Klemsa)	57 - Computational Conformal Mapping in Education and Engineering Practice (Presenter: Maqsood Chaudhry)
		140 - Implementing Variable Power Transmission Patterns for Authentication Purposes (Presenter: Dalia Alamleh)	

SESSION 17 - NEURAL NETWORKS	SESSION 18 - DATA SCIENCE	SESSION 19 - SECURITY	SESSION 20 - COMMUNICATION
101 - Preventing Neural Network Weight Stealing via Network Obfuscation (Presenter: Jalal Al-afandi, Kálmán Szentannai)	256 - Time Series Analysis of Financial Statements for Default Modelling (Presenter: Kirill Romanyuk)	446 - A Review of Cyber Security Issues in Hospitality Industry (Presenter: Neda Shabani)	319 - A Novel Routing based on OLSR for NDN-MANET (Presenter: Xian Guo)
394 - Adaptive Blending Units: Trainable Activation Functions for Deep Neural Networks (Presenter: Leon Sütfeld)	440 - Data Market Implementation to Match Retail Customer Buying versus Social Media Activity (Presenter: Anton Ivaschenko)	245 - Malware Analysis with Machine Learning for Evaluating the Integrity of Mission Critical Devices (Presenter: Robert Heras)	115 - In-app Activity Recognition from Wi-Fi Encrypted Traffic (Presenter: Madushi Pathmaperuma)
257 - Applications of Z-numbers and Neural Networks in Engineering (Presenter: Raheleh Jafari)	197 - Data Augmentation and Clustering for Vehicle Make/Model Classification (Presenter: Mohamed Nafzi)	48 - Statistical Analysis to Optimize the Generation of Cryptographic Keys from Physical Unclonable Functions (Presenter: Bertrand Cambou)	441 - Energy Efficient Channel Coding Technique for Narrowband Internet of Things (Presenter: Emmanuel Migabo)
426 - Application of Neural Networks to Characterization of Chemical Sensors (Presenter: Mahmoud Iskandarani)	111 - A Study of Modeling Techniques for Prediction of Wine Quality (Presenter: Ashley Laughter)	134 - Contactless Palm Vein Authentication Security Technique for Better Adoption of e-Commerce in Developing Countries (Presenter: Sunday Alabi)	19 - Preliminary Experiments on the Use of Nonlinear Programming for Indoor Localization (Presenter: Stefania Monica)
372 - 5G-FOG: Freezing of Gait Identification in Multi-Class Softmax Neural Network Exploiting 5G Spectrum (Presenter: Jan Sher Khan)	251 - Machine Learning for Offensive Security: Sandbox Classification using Decision Trees and Artificial Neural Networks (Presenter: William Pearce)	164 - Tightly Close it, Robustly Secure it: Key-based Lightweight Process for Propping up Encryption Techniques (Presenter: Muhammed Al-Muhammed)	183 - A Novel Speed Estimation Algorithm for Mobile UE's in 5G mmWave Networks (Presenter: Alawi Alattas)
371 - Application of Machine Learning in Deception Detection (Presenter: Otasowie Iyare)	139 - Strategic Inference in Adverserial Encounters using Graph Matching (Presenter: D. Michael Franklin)	265 - LightGBM Algorithm for Malware Detection (Presenter: Mouhammd Alkasassbeh)	236 - Equivalent Thermal Conductivity of Metallic-Wire for On-Line Monitoring of Power Cables (Presenter: Mamdooh Al Saud)
390 - A New Approach to Estimate the Discharge Coefficient in Sharp-Crested Rectangular Side Orifices using Gene Expression Programming (Presenter: Hossein Bonakdari)	9 - Quantifying Apparent Strain for Automatic Modelling, Simulation, Compensation and Classification in Structural Health Monitoring (Presenter: Enoch A-iyeh)	13 - Invisibility and Fidelity Vector Map Watermarking based on Linear Cellular Automata Transform (Presenter: Saleh AL-ardhi)	214 - An Architecture for Dynamic Contextual Personalization of Multimedia Narratives in IoT Environments (Presenter: Ricardo Rios)
	99 - A New Approach to Supervised Data Analysis in Embedded Systems Environments: A Case Study (Presenter: Paul David Rosero-Montalvo)	35 - Introduction of a Hybrid Monitor for Cyber-Physical Systems (Presenter: Julius Aguma)	188 - Improved Deterministic Broadcasting for Multiple Access Channels (Presenter: Bader Aldawsari)

Thursday, July 16

5:15 PM - 5:45 PM (BST/UTC+1)

POSTER PRESENTATIONS

267 – Towards porting Astrophysics Visual Analytics Services in the European Open Science Cloud (Presenter: Eva Sciacca)

90 – Design and Implementation of Cryptocurrency Price Prediction System (Presenter: Daniel Marinov)

249 – The Automated Solar Activity Prediction System (ASAP) Update based on Optimization of a Machine Learning Approach (Presenter: Ali Abed)

205 – An Assessment Algorithm for Evaluating Students Satisfaction in e-Learning Environments: A Case Study (Presenter: Mihai Caramihai)

17 – Classification of a Pedestrian's Behaviour using Dual Deep Neural Networks (Presenter: James Spooner)

282 – Discourse Analysis on Learning Theories and AI (Presenter: Karen Jackson, Rosemary Papa)

36 – False Asymptotic Instability Behavior at Iterated Functions with Lyapunov Stability in Nonlinear Time Series (Presenter: Charles Roberto Telles)

Friday, July 17

2:15 PM - 2:45 PM (BST/UTC+1)

POSTER PRESENTATIONS

247 – Analysis of Structural Liveness and Boundedness in Weighted Free-Choice Net based on Circuit Flow Values (Presenter: Yojiro Harie)

410 – The Use of New Technologies in the Organization of the Educational Process (Presenter: Nurgul Nalgozhina)

168 – How Many Clusters? An Entropic Approach to Hierarchical Cluster Analysis (Presenter: Vera Ignatenko)

125 – Development of Prediction Methods for Taxi Order Service on the Basis of Intellectual Data Analysis (Presenter: Nikita Andriyanov)

393 – The Influence of Methodological Tools on the Diagnosed Level of Intellectual Competence in Older Adolescents (Presenter: Yana Sipovskaya)

427 – Computer Graphics-based Analysis of Anterior Cruciate Ligament in a Partially Replaced Knee (Presenter: Ahmed Imran)

61 – Strategic Behavior Discovery of Multi-Agent Systems based on Deep Learning Technique (Presenter: Boris Morose, Gal Zaidman, Sabina Aledort)

computing
conference 2020