

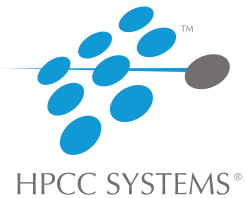


Future Technologies Conference

6-7 December 2016, San Francisco

Conference Agenda

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CONFERENCE AGENDA

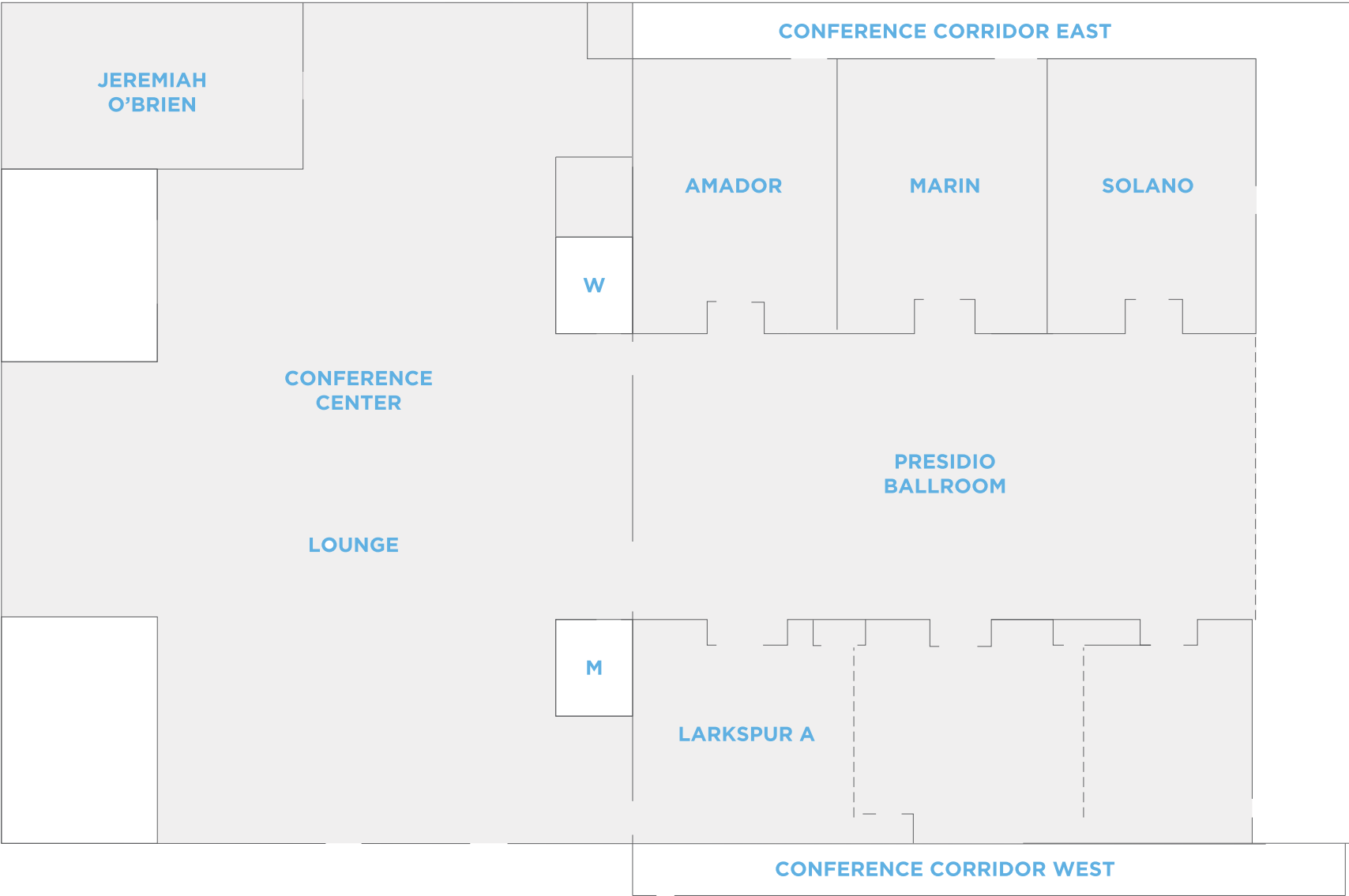
DAY 1 (6th December)

- 8:00 am – 8:30 am **Delegates Check-in**
- 8:30 am – 8:45 am **Conference Opening**
- 8:45 am – 10:45 am **MORNING PLENARY (Presidio)**
Laura Haas, IBM
Bin He, University of Minnesota
James Loudermilk, FBI
- 10:45 am – 11:15 am **Networking Break**
- 11:15 am – 12:30 pm **PAPER PRESENTATIONS**
Session 1 - Machine Learning (Presidio)
Session 2 - Internet of Things (Amador)
Session 3 - Data Science (Marin)
Session 4 - e-Learning (Solano)
Session 5 - Image Processing (Larkspur A)
- 12:30 pm – 1:30 pm **Lunch**
- 1:30 pm – 3:30 pm **PAPER PRESENTATIONS**
Session 6 - Artificial Intelligence (Presidio)
Session 7 - Technology Trends (Amador)
Session 8 - Security and Privacy (Marin)
Session 9 - Intelligent Systems (Solano)
Session 10 - Human Computer Interaction (Larkspur A)
- 3:30 pm – 4:00 pm **Networking Break**
- 4:00 pm – 6:00 pm **PAPER PRESENTATIONS**
Session 11 - Artificial Intelligence (Presidio)
Session 12 - Technology Trends (Amador)
Session 13 - Security and Privacy (Marin)
Session 14 - Intelligent Systems (Solano)
Session 15 - Virtual Reality (Larkspur A)
- 6:00 pm – 7:00 pm **Evening Snacks and Networking (The Wardroom)**

DAY 2 (7th December)

- 8:00 am – 8:30 am **Breakfast and Networking**
- 8:30 am – 10:15 am **MORNING PLENARY (Presidio)**
Arjuna Chala, HPCC Systems/ LexisNexis
Ella Atkins, University of Michigan
Ruzena Bajcsy, UC Berkeley
- 10:15 am – 11:30 am **POSTER PRESENTATIONS (Lounge)**
PROJECT DEMONSTRATIONS (Presidio)
- 11:30 am – 12:45 pm **PAPER PRESENTATIONS**
Session 16 - e-Learning (Presidio)
Session 17 - Image Processing (Amador)
Session 18 - Communication Systems (Marin)
Session 19 - Technology Trends (Solano)
Session 20 - Data Science (Larkspur A)
- 12:45 pm – 1:30 pm **Lunch**
- 1:30 pm – 3:30 pm **PAPER PRESENTATIONS**
Session 21 - Artificial Intelligence (Presidio)
Session 22 - Robotics (Amador)
Session 23 - Security and Privacy (Marin)
Session 24 - Intelligent Systems (Solano)
Session 25 - Electronics (Larkspur A)
- 3:30 pm – 4:00 pm **Networking Break**
- 4:00 pm – 5:30 pm **PAPER PRESENTATIONS**
Session 26 - Data Science (Presidio)
Session 27 - Technology Trends (Amador)
Session 28 - Communication Systems (Marin)
Session 29 - Internet of Things (Solano)
Session 30 - Machine Learning (Larkspur A)
- 5:30 pm – 6:00 pm **Closing Ceremonies**

FLOOR PLAN



TO UPPER LOBBY
AND FRONT DESK

KEYNOTE SPEAKERS

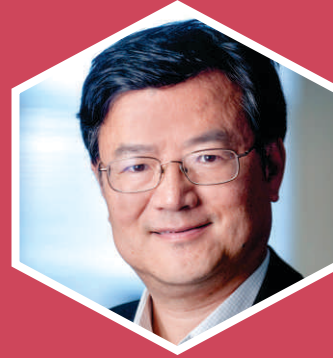


Laura Haas

IBM Fellow and Director of IBM Research's Accelerated Discovery Lab

6th December 2016 | 8:45 am

Title: Data, Analytics, and the Dawn of the Cognitive Era of Computing



Bin He

Director, Institute for Engineering in Medicine, University of Minnesota

6th December 2016 | 9:15 am

Title: Flying High with Thought: Brain-Computer Interface



James Loudermilk

Senior Level Technologist for the FBI Science and Technology Branch

6th December 2016 | 9:45 am



Arjuna Chala

Sr. Director of Technology Development for the HPCC Systems platform

7th December 2016 | 8:30 am

Title: Open source HPCC Systems Big Data platform



Ella Atkins

Professor, Department of Aerospace Engineering, University of Michigan

7th December 2016 | 9:00 am

Title: Safe Autonomous Manned and Unmanned Flight in Off-Nominal Conditions



Ruzena Bajcsy

NEC professor, EECS department UC Berkeley, CA

7th December 2016 | 9:30 am

Title: Personalized model of kinematic and dynamic of physical activities

6th DECEMBER (11:15 am – 12:30 pm)

PAPER PRESENTATIONS

Session 1 - Machine Learning Session Chair: Manuel Chiachio Ruano (Presidio)	Session 2 - Internet of Things Session Chair: Ah-Lian Kor (Amador)	Session 3 - Data Science Session Chair: Shami Nejadi (Marin)	Session 4 - e-Learning Session Chair: Eleni Mangina (Solano)	Session 5 - Image Processing Session Chair: Omar Elkeelany (Larkspur A)
<p>119 - Deep Learning-based Pipeline to Recognize Alzheimer's Disease using fMRI Data (Presenter: Saman Sarraf, United States)</p> <p>302 - Neural Network CAPTCHA Crackers (Presenter: Chris Pollett, United States)</p> <p>450 - EMG Signal Patterns Recognition based on Feedforward Artificial Neural Network Applied to Robotic Prosthesis Myoelectric Control (Presenter: Carlos Alberto Calderón Córdova, Ecuador)</p> <p>387 - Forecasting Savings of Building Energy Systems using Artificial Neural Networks (Presenter: Andrew Ours, United States)</p> <p>201 - An Analog Neural Network that Learns Sudoku-Like Puzzle Rules (Presenter: Saeid Barzegarjalali, United States)</p>	<p>162 - SMART-ITEM: IoT-Enabled Smart Living (Presenter: Ah-Lian Kor, United Kingdom)</p> <p>142 - IoT Architecture Challenges and Issues: Lack of Standardization (Presenter: Sarah Ahmed AlQaseemi, Maria Almulhim, Hajer Almulhim, Saudi Arabia)</p> <p>196 - IoT Applications in an Adaptive Intelligent System with Responsive Anomaly Detection (Presenter: Tammy Fuller, Gerald Deane, United States)</p> <p>276 - Design, Fabrication and Testing of Smart Lighting System (Presenter: Arun Kumar, Singapore)</p> <p>173 - Smart SISO-MPC based Energy Management System for Commercial Buildings (Presenter: Raj Naidoo, South Africa)</p>	<p>26 - Educational Evaluation and Prediction of School Performance through Data Mining and Genetic Algorithms (Presenter: Israel Patino Galvan, Mexico)</p> <p>90 - Modification of Aggregated Randomized Indices Method for Credit Scoring (Presenter: Kirill Romanyuk, Russia)</p> <p>129 - A Feature Grouping Method for Ensemble Clustering of High-Dimensional Genomic Big Data (Presenter: Dewan Md Farid, Belgium)</p> <p>150 - Intelligent Syncope Disease Prediction Framework using DM-Ensemble Techniques (Presenter: Ammar Asjad Raja, Germany)</p> <p>166 - Big Data Application in Functional Magnetic Resonance Imaging using Apache Spark (Presenter: Saman Sarraf, United States)</p>	<p>118 - Data Science at Udemy: Agile Experimentation with Algorithms (Presenter: Larry Wai, United States)</p> <p>346 - Augmented Reality Digital Technologies (ARDT) for Foreign Language Teaching and Learning (Presenter: Olga Scrivner, Nitocris Perez, United States)</p> <p>24 - The Implementation of Digital Technology for Automation of Teaching Processes (Presenter: Oliver Moravcik, Slovakia)</p> <p>186 - Connecting the Areas of eLearning, Virtual Training and Engineering in Multidisciplinary eRobotics Applications (Presenter: Nico Hempe, Germany)</p> <p>153 - Multiple Criteria Comparative Evaluation on the Interoperability of LMS by Applying COPRAS Method (Presenter: Bakhouyi Abdellah, Morocco)</p>	<p>299 - Understanding Game Actions: The Development of a Post-Processing Method for Audio-Visual Scene Analysis (Presenter: Raphael Marczak, New Zealand)</p> <p>85 - Nodule Detection from Posterior and Anterior Chest Radiographs with Different Methods (Presenter: Chayadevi Senigala Kuruba, India)</p> <p>295 - Morphological Correlation for Color Image Matching (Presenter: Saul Martinez Diaz, Mexico)</p> <p>451 - Performance Evaluation of the PCA Versus Improved PCA (IPCA) in Image Compression, and in Face Detection and Recognition (Presenter: Abdulaziz Alorf, United States)</p> <p>378 - Performance Analysis of Particle Swarm Optimization Algorithm-based Parameter Tuning for Fingerprint Image Enhancement (Presenter: Adamu Mohammed, Nigeria)</p>

6th DECEMBER (1:30 pm – 3:30 pm)

PAPER PRESENTATIONS

Session 6 - Artificial Intelligence Session Chair: Seng-Beng Ho (Presidio)	Session 7 - Technology Trends Session Chair: Manuel Chiachio Ruano (Amador)	Session 8 - Security and Privacy Session Chair: Fred Kashefi (Marin)	Session 9 - Intelligent Systems Session Chair: Chris Pollett (Solano)	Session 10 - Human Computer Interaction Session Chair: Victoria Bellotti (Larkspur A)
<p>87 - Directional Scan Path Characterization of Eye Tracking Sequences: A Multi-Scale Approach (Presenter: Michael McGuire, United States)</p> <p>216 - Nonlinear Semantic Space Based on Lexical Graph (Presenter: Rajan Bhattacharyya, United States)</p> <p>230 - Natural Encoding of Information through Interacting Impulses (Presenter: Vladimir Lerner, United States)</p> <p>278 - Understanding Autonomous Agents: A Cybernetics and Systems Science Perspective (Presenter: Predrag Tosic, United States)</p> <p>213 - Proof Strategies and Automated Advice (Presenter: Levis Zerpa, Ecuador)</p> <p>203 - Towards Autonomous Investment Analysts - Helping People to Make Good Investment Decisions (Presenter: Paulo Andre Lima de Castro, Brazil)</p> <p>80 - A Modified Principal Component Analysis Approach to Automated Essay-Type Grading (Presenter: Odunayo Oduntan, Nigeria)</p>	<p>456 - ABROA : Audio-based Room-Occupancy Analysis using Gaussian Mixtures and Hidden Markov Models (Presenter: Rafael Valle, United States)</p> <p>49 - Influences of XBRL & IFRS on Business Reporting – Canada (Presenter: Manchuna Shanmuganathan, Canada)</p> <p>58 - Will it be Cloud or will it be Fog? F2C, A Novel Flagship Computing Paradigm for Highly Demanding Services (Presenter: Xavi Masip, Spain)</p> <p>72 - Research of WSN and Big Data Analysis based Continuous Pulse Monitoring System for Efficient Physical Training (Presenter: Yuan HongLiang, China)</p> <p>82 - Five Reversible Quantum Gates in Quipper (Presenter: Abdulwahab Alkharashi, Saudi Arabia)</p> <p>34 - A Novel Mean-shift Architecture for Scalable Multiprocessor Implementation (Presenter: Amna Tehreem, Pakistan)</p> <p>111 - Big Data in Healthcare: Prospects, Challenges and Resolutions (Presenter: Iroju Olaronke, Ojerinde Oluwaseun Adeniyi, Nigeria)</p>	<p>170 - Protecting Documents with Sticky Policies and Identity-based Encryption (Presenter: Greg Spyra, United Kingdom)</p> <p>81 - Privacy Risk Awareness and the Behavior of Smartwatch Users: A Case Study of Indiana University Students (Presenter: Abdulwahab Alkharashi, United States)</p> <p>84 - A Review of Computer Simulation for Fraud Detection Research in Financial Datasets (Presenter: Edgar Lopez Rojas, Sweden)</p> <p>115 - Biometrics Safety Engineering in Mobile Devices (Presenter: Wojciech Wodo, Poland)</p> <p>149 - A Fast Fingerprint Identification Approach via Circular String Matching Filters (Presenter: Mai Alzamel, United Kingdom)</p> <p>56 - Scrambling High Dynamic Range Videos (Presenter: Med Amine Touil, Tunisia)</p> <p>102 - A Memetic Algorithm Approach to Clustering in Mobile Wireless Sensor Networks (Presenter: Masood Ahmad, Pakistan)</p>	<p>255 - A Rule-based Guidance (RBG) System with Graphical Representation of Uncertainty (Presenter: Ah-Lian Kor, United Kingdom)</p> <p>36 - Immersive Design: Dissolution of the Body Image (Presenter: Tatjana Crossley, United Kingdom)</p> <p>214 - Intelligent Indoor Emergency Evacuation Systems (Presenter: Jane W. Liu, Taiwan)</p> <p>147 - Proposal of the Visualization System of Simultaneous Purchasing Relation using POS Data with the ID of the Supermarket (Presenter: Ko Hashimoto, Japan)</p> <p>182 - Proposal of the Review Recommendation System using the Concurrent Network (Presenter: Ryo Shiraishi, Japan)</p> <p>183 - Effects of Jamming on a Multi-Agent Flocking Model with Distributed Estimation of Global Features (Presenter: Zhaoyang Fu, United States)</p> <p>268 - A Belief Rule-based Environmental Responsibility Assessment for Small and Medium-Sized Enterprise (Presenter: Ah-Lian Kor, United Kingdom)</p>	<p>31 - Tracking the Activities of Daily Lives: An Integrated Approach (Presenter: Roanna Lun, United States)</p> <p>37 - Evaluating the Impact of Changing Contexts on Mobile Application Usability within Agile Environments (Presenter: Ger Joyce, United Kingdom)</p> <p>125 - TruthSift: A Platform for Collective Rationality (Presenter: Eric Baum, United States)</p> <p>163 - Communicating with WheelScout Via Voice - Speech Technology in a Mobile Navigation App computing Barrier-Free Routes (Presenter: Bettina Harriehausen-Muehlbauer, Germany)</p> <p>470 - A Framework for Integrating Multicultural Issues in Mobile Health Apps Design (Presenter: Zornitza Prodanoff, United States)</p> <p>379 - Human/Machine Interface Dialog Integrating New Information and Communication Technology for Pathological Voice (Presenter: Fares Zaidi, Algeria)</p>

6th DECEMBER (4:00 pm – 6:00 pm)

PAPER PRESENTATIONS

Session 11 - Artificial Intelligence Session Chair: Manuel Chiachio Ruano (Presidio)	Session 12 - Technology Trends Session Chair: Ah-Lian Kor (Amador)	Session 13 - Security and Privacy Session Chair: Omar Elkeelany (Marin)	Session 14 - Intelligent Systems Session Chair: Chris Pollett (Solano)	Session 15 - Virtual Reality Session Chair: Kohei Arai (Larkspur A)
<p>33 – ANFIS Application to Predict the Compressive Strength of Lightweight self-compacting concrete (Presenter: Shami Nejadi, Australia)</p> <p>54 – Tibetan Sentence Sentiment Computing based on Statistics (Presenter: Yan Xiaodong, Zhao Xiaobing, Sun Yuan, China)</p> <p>75 – Decision-Making Method based on the Interval Valued Neutrosophic Graph (Presenter: Said Broumi, Morocco)</p> <p>110 – Performance Response Tests on a Multivariable Fuzzy Rule-based Relay for Short Circuits in AC Micro-Grids (Presenter: Aminu A Maruf, Malaysia)</p> <p>172 – Cognitive Artificial Intelligence Method for Measuring Transformer Performance (Presenter: Adang Suwandi Ahmad, Indonesia)</p> <p>284 – Application of Nature Inspired Metaheuristic Techniques to Overcurrent Relay Coordination (Presenter: Vijay Kale, India)</p> <p>296 – A Convergence Algorithm for Function Optimization (Presenter: Mohammadbagher Ahmadi, Iran)</p>	<p>320 – Some Thoughts on the Future of Parallel Computing and Connectionist Massively Parallel Models (Presenter: Predrag Tosic, United States)</p> <p>139 – Carpal Tunnel Syndrome's Societal Induced Psychological, Sociological, and Psychosomatic Workplace Effects (Presenter: Stella Rostkowski, United States)</p> <p>179 – Memory-Centric Approach of Network Processing in a Modified RISC-based Processing Core (Presenter: Danijela Efnusheva, Macedonia)</p> <p>187 – From Technology Assessment to Responsible Research and Innovation (RRI) (Presenter: Veikko Ikonen, Finland)</p> <p>191 – A Framework for Game Engine Selection for Gamification and Serious Games (Presenter: Zulfiqar Ali, Pakistan)</p> <p>226 – A Performance Estimation Model for Ls-Dyna Computation Workload (Presenter: Joseph Issa, Lebanon)</p> <p>266 – Sustainable Availability Provision in Distributed Cloud Services (Presenter: Ah-Lian Kor, United Kingdom)</p>	<p>188 – Ensemble-based Model for DDoS Attack Detection and Flash Event Separation (Presenter: Sajal Bhatia, United States)</p> <p>208 – Privacy by Region: Evaluation Online Users' Privacy Perceptions by Geographical Region (Presenter: Hsiao Ying Huang, United States)</p> <p>212 – A Survey on DDoS Attacks: Challenges and Solutions in Real-world Data Centers (Presenter: Samar Raza Talpur, Ireland)</p> <p>222 – Determining Predisposition to Insider Threat Activities by using Text Analysis (Presenter: Zornitza Prodanoff, United States)</p> <p>308 – Mitigating Service Impersonation Attacks in Clouds (Presenter: Sarra Alqahtani, United States)</p> <p>406 – Open Source Intelligence Base Cyber Threat Inspection Framework for Critical Infrastructures (Presenter: Seokcheol Lee, South Korea)</p> <p>297 – Message Security for Automation and Control Applications based on IEC61131-3 (Presenter: Fred Kashefi, United States)</p>	<p>269 – Rise of Intelligent Organizations: Using BI Tools to Build Intelligent Knowledge Capital (Presenter: Fawzi Benmessaoud, United States)</p> <p>280 – A Belief Rule based Expert System to Assess Clinical Bronchopneumonia Suspicion (Presenter: Karl Andersson, Sweden)</p> <p>282 – Toward a Convergence between Value and Utility through a Polynomial Representation (Presenter: William Saade, United States)</p> <p>285 – Ocean Data Vulnerability to Cyber Manipulation and Consequences for Infrastructural Resilience (Presenter: Robert Spousta III, United States)</p> <p>355 – Aerosol Sampler (Presenter: Shubhalaxmi Kher, United States)</p> <p>200 – The Use of Ontologies as Efficient and Intelligent Knowledge Management Tool (Presenter: Patience Usoro Usip, Nigeria)</p> <p>60 – Towards Real-Time Embedded System Design for Video Capturing and Privacy Protection (Presenter: Omar Elkeelany, United States)</p>	<p>164 – The Concept of Development and Test Results of the Multimedia Shooting Detection System (Presenter: Aleksander Nawrat, Poland)</p> <p>199 – Virtual Reality as Trend Contextualising an Emerging Consumer Technology into Trend Analysis (Presenter: Aki Jarvinen, United Kingdom)</p> <p>385 – Development of a Virtual Coach Scenario for Hand Therapy using LEAP Motion (Presenter: Maggie Sourial, Egypt)</p> <p>417 – Bio-Inspired Animated Characters a Mechanistic & Cognitive View (Presenter: Benjamin Kenwright, United Kingdom)</p> <p>420 – Future Mixed Reality Educational Spaces (Presenter: Eleni Mangina, Ireland)</p> <p>448 – Creating 3D Avatars from Artistic Drawing for VR and Games Applications (Presenter: Stephen Larson, United States)</p> <p>473 – Computing Presence in Nonfigurative Virtual Environment under Color and Motion Stimulus (Presenter: Seongsin Jeon, South Korea)</p>

7th DECEMBER (10:15 am – 11:30 am)

PROJECT DEMONSTRATIONS

Session Chair: Brittany Newell

(Presidio Ballroom)

- 121 - A Non-Biological AI Approach towards Natural Language Understanding (Presenter: Stephen Lernout, United States)
- 350 - Creating Powerful Dashboards and Visualizations of Direct and Indirect SLOs Measures using Google's Dataset Publishing Language (DPSL) and Google's Public Data Explorer (GPDE) to Advance Assessment Practices in Institutional Research at Institutions of Higher Education (Presenter: Chris Boosalis, United States)
- 486 - Using GPUs to Accelerate Data Discovery and Visual Analytics (Presenter: Todd Mostak, United States)
- 283 - Combining a Collaborative Learning Framework with an E-learning Tool to Improve Learning and Professional Development in Blended Learning Environments (Presenter: Keith Willey, Australia)
- 45 - A Self-Managed Architecture for Sensor Networks based on Real Time Data Analysis (Presenter: Gabriel Martins Dias, Spain)

POSTER PRESENTATIONS

Session Chair: Victoria Bellotti

(Lounge)

- 104 - Green Energy Computing of Heterojunction with Intrinsic Thin Layer (HIT) Solar Cell by CAD (Computer Aided Design) (Presenter: MinHung Lee, Taiwan)
- 155 - Group of the Polymorphous Modes of Operation - Pm (Presenter: Petr Zacek, Czech Republic)
- 192 - Detection of Mobile Botnets using Neural Networks (Presenter: David Malanik, Czech Republic)
- 306 - Employing Efficient Techniques based on 2D DMWT/FastICA for Supervised Facial Recognition (Presenter: Ahmed Aldhahab, United States)
- 310 - GRAVID: An Indigenous m-Health Tool for Smart Et Connected Communities (Presenter: Joke Badejo, Nigeria)
- 390 - Fast Optic Disc Segmentation in Fundus Images (Presenter: M. Elena Martinez-Perez, Mexico)
- 436 - A Kinect-Aided Method to Estimate the Fundus Camera Extrinsic Parameters for Three-Dimensional Reconstruction of Retinal Blood Vessels (Presenter: M. Elena Martinez-Perez, Mexico)
- 443 - TELEPROM-G-A Study Evaluating Access and Care Delivery of Telehealth Services Among Community-based Seniors (Presenter: Cheryl Forchuk, Canada)
- 452 - Multi-Agent based Framework for Person Re-Identification in Video Surveillance (Presenter: Muna Al Rahbi, United Kingdom)
- 460 - Augmented Reality Crossover Gamified Design for Sustainable Engineering Education (Presenter: Fariha Salman, United States)
- 204 - Adaptable Virtual Keyboard and Mouse for People with Special Needs (Presenter: Alexandre Henzen, Brazil)
- 501 - SentiMo fine-grain social sentiment and emotion classification (Presenter: Wang Zhaoxia, Singapore)

7th DECEMBER (11:30 am – 12:45 pm)

PAPER PRESENTATIONS

Session 16 - e-Learning Session Chair: Ah-Lian Kor (Presidio)	Session 17 - Image Processing Session Chair: Manuel Chiachio Ruano (Amador)	Session 18 - Communication Systems Session Chair: Brittany Newell (Marin)	Session 19 - Technology Trends Session Chair: Predrag Tosic (Solano)	Session 20 - Data Science Session Chair: Shami Nejadi (Larkspur A)
<p>290 – EnhAnced Government Learning Portal: Production of Universally Accessible Open Educational Resources (Presenter: Catherine Mulwa, Ireland)</p> <p>411 – Value Creation Stories in a Community of Practice: Assessing Value in an Online Masters Program (Presenter: Michael Menchaca, United States)</p> <p>449 – Graspable Math: Towards Dynamic Algebra Notations that Support Learners Better than Paper (Presenter: Erik Weitnauer, United States)</p> <p>307 – OLeCenT, A Tool towards Improving Online Learner-Centric Course Delivery (Presenter: Carl Beckford, Jamaica)</p>	<p>454 – A Machine Learning based Framework for Parameter based Multi-Objective Optimisation of a H.265 Video CODEC (Presenter: Maryam Al Barwani, United Kingdom)</p> <p>459 – Detection of the Characters from the License Plates by Cascade Classifiers Method (Presenter: Luis Rodrigo Barba Guamán, Ecuador)</p> <p>487 – A Robust Preprocessing Algorithm for Iris Segmentation from Low Contrast Eye Images (Presenter: Joke Badejo, Nigeria)</p> <p>491 – A Palprint based Recognition System for Smartphone (Presenter: C J Hwang, United States)</p> <p>453 – Comparative Analysis of Vehicle Detection in Urban Traffic Environment using Haar Cascaded Classifiers & Blob Statistics (Presenter: Yumnah Hasan, Pakistan)</p>	<p>171 – Big Data Analytics on MANET Routing Standardization using Quality Assurance Metrics (Presenter: C J Hwang, United States)</p> <p>128 – Two state Markov chain based Predictive Model for Cognitive Radio Spectrum availability: A conceptual approach (Presenter: Niran Oluwaranti, Nigeria)</p> <p>64 – Modeling and Performance Analysis of the IEEE 802.11P Enhanced Distributed Channel Access Function for Vehicular Network (Presenter: A. F. M. Shahen Shah, Turkey)</p> <p>169 – Superluminal Communications, Computers and Superluminal Informatics in Future (Presenter: Huaan Zhang, China)</p> <p>175 – Efficient Self-Stabilizing Grundy Coloring Algorithms (Presenter: Ali Mansouri, Tunisia)</p>	<p>194 – Optimal Control of a Laser Source to Generate a Minimum Time Trajectory of a Droplet in a Liquid Layer (Presenter: Paolo Bosetti, Italy)</p> <p>288 – Practical Tera-scale Walsh-Hadamard Transform (Presenter: Yi Lu, China)</p> <p>303 – Design and Specification of Building Integrated DC Electricity Networks (Presenter: Ameer Al-Khaykan, United Kingdom)</p> <p>467 – Design of a Decision Support System Framework for Small-Business Managers: A Context of B2C E-Commerce Environment (Presenter: Madhury Khatun, Australia)</p> <p>27 – VDroid: A Lightweight Virtualization Architecture for Smartphones (Presenter: Munam Shah)</p>	<p>154 – A Study of Recommendation Considering Cancellation (Presenter: Yoshiaki Kato, Japan)</p> <p>180 – Loyal Customer Discriminant Model using Customer Features on EC Site (Presenter: Hiroyuki Oikawa, Japan)</p> <p>237 – The Extended Song Rule as a Validator of Analytical Results –A Note Correcting “System Reliability Results” in a Review of the Literature (Presenter: Wheyming Song, Taiwan)</p> <p>261 – An Ensemble of Automatic Algorithms for Forecasting Resource Utilization in Cloud (Presenter: Shobha Gangadhar, Jyoti Shetty, India)</p> <p>73 – Sports Skill Discrimination with Motion Frequency Analysis (Presenter: Toshiyuki Maeda, Japan)</p>

7th DECEMBER (1:30 pm – 3:30 pm)

PAPER PRESENTATIONS

Session 21- Artificial Intelligence Session Chair: Toshiyuki Maeda (Presidio)	Session 22 - Robotics Session Chair: Predrag Tosic (Amador)	Session 23 - Security and Privacy Session Chair: Fred Kashefi (Marin)	Session 24 - Intelligent Systems Session Chair: Ah-Lian Kor (Solano)	Session 25 - Electronics Session Chair: Kohei Arai (Larkspur A)
<p>301 - An Algorithmic Approach to Music Retrieval by Emotion based on Feature Data (Presenter: Pamela Wood, United States)</p> <p>325 - Credit Scoring Model: A Combination of Genetic Programming and Deep Learning (Presenter: Dang Xuan Thanh Duong, Vietnam)</p> <p>348 - A Combinatorial Approach for Calculating Rail-Fly Connectivity Index in India based on Fuzzy Logic (Presenter: Hari Bhaskar Sankaranarayanan, Rukmangadha Venkatappa, India)</p> <p>419 - Deep Thinking and Quick Learning for Viable AI (Presenter: Seng Beng Ho, Singapore)</p> <p>434 - An Information Theoretic Approach for Knowledge Representation using Petri Nets (Presenter: Manuel Chiachio Ruano, United Kingdom)</p> <p>209 - Imparting Data Knowledge in Discrete Data Volumes using Crowded Agent Approach for Multi-Perspective and Visualized Big Data (Presenter: Hiba Khalid, Pakistan)</p> <p>501 - SentiMo fine-grain social sentiment and emotion classification (Presenter: Wang Zhaoxia, Singapore)</p>	<p>77 - Robotic System for Plaster and Finishing Works on the Construction Site (Presenter: Alexey Bulgakov, Russia)</p> <p>96 - Robust Mobile Control Strategy of I-PENTAR Assistant Robot (Presenter: Magdi Mahmoud, Saudi Arabia)</p> <p>177 - Detecting the Position of the Fish Robot using the Color Segment Algorithm (Presenter: Kyoo Jae Shin, South Korea)</p> <p>294 - Multimodal Architecture for Emotion in Robots using Deep Learning (Presenter: Mehdi Ghayoumi, United States)</p> <p>394 - Exploring Interactive Teaching of a Multi-Modal Emotional Expression of a Humanoid Robot (Presenter: Myriam Anis, Egypt)</p> <p>416 - Realization of Aquarium Robot Holographic World using 3 Axes Tracking Optical Flow Detecting Method (Presenter: Yogendra Rao Musunuri, South Korea)</p> <p>57 - Design and Implementation Prototype of a Smart House System at Low Cost and Multi-Functional (Presenter: Ali Jwaid, United Kingdom)</p>	<p>389 - Analysing Denial of Service Attack Traffic Signature in IPv6 Local Network using Correlation Inspection (Presenter: Ali Jwaid, United Kingdom)</p> <p>395 - A Survey of Digital Forensics Tools for Database Extraction (Presenter: Ebru Cankaya, United States)</p> <p>396 - Detecting Black-Hole Attacks in WSNs using Multiple Base Stations and Check Agents (Presenter: Reem Alattas, United States)</p> <p>405 - Digital Forensic Consideration for Financial IT Security (Presenter: Sungmoon Kwon, South Korea)</p> <p>447 - Intelligent Targeting with Contextual Binding (Presenter: Jim Q. Chen, United States)</p> <p>457 - Protecting Critical Buses in Power-Grid Against Data Attacks: Adaptive Protection Schemes for Smart Cities (Presenter: Charith Wickramaarachchi, United States)</p> <p>441 - Degradation Analysis of Generalized Chua's Circuit Generator of Multi-Scroll Chaotic Attractors and its Implementation on PIC32 (Presenter: Rodrigo Méndez-Ramírez, Mexico)</p>	<p>366 - Sentiment Negation: A Novel Approach in Measuring Negation Score (Presenter: Y.H.P.P Priyadarshana, Sri Lanka)</p> <p>368 - Exploring the Potential in Utilising Smartphones to Aid in the Treatment and Management of Inflammatory Bowel Disease (Presenter: Nader AlShamma, United Kingdom)</p> <p>397 - Prediction of Energy Consumption in Buildings by System Identification (Presenter: Darrion Long, United States)</p> <p>398 - Unified Software Engineering Reuse (USER) using Stable Analysis, Design and Architectural Patterns (Presenter: Charles Flood, United States)</p> <p>400 - Influence Pattern as a form of Unified Software Engineering Reuse (Presenter: Charles Flood, United States)</p> <p>408 - Visual-Netsim: Development of an Interactive Browser based Network Simulator (Presenter: Farrukh Shahzad, United States)</p> <p>464 - Using Reputation Stable Analysis Patterns as Model based Software Reuse (Presenter: Charles Flood, United States)</p>	<p>292 - Multiple-Input Bridge Converter for Connecting Multiple Renewable Energy Sources to a DC System (Presenter: Grace Larson, United States)</p> <p>446 - Industrial Capacitance Sensors and Actuators (Presenter: Brittany Newell, United States)</p> <p>483 - Electrical Islanding Detection based on the Integration of Synchronized Phasor Measurement (Presenter: Steve Chan, United States)</p> <p>113 - Current and Future Issues in Electronics and Automobiles Remanufacturing Operations (Presenter: John Kafuku, Malaysia)</p> <p>161 - Optimized Plan of Charging Stations for Management of Demands (Presenter: Mojgan Bashiri, Iran)</p> <p>224 - A Survey of Maximum Peak Power Tracking Techniques used in Photovoltaic Power Systems (Presenter: Aadel Soualmia, Algeria)</p> <p>39 - Design of 40URT Heat Pump for Vertical Aquarium using Processed Waste Hot Water from Power Plants (Presenter: Amarnath Varma Angani, South Korea)</p>

7th DECEMBER (4:00 pm – 5:30 pm)

PAPER PRESENTATIONS

Session 26 - Data Science Session Chair: Toshiyuki Maeda (Presidio)	Session 27 - Technology Trends Session Chair: Shami Nejadi (Amador)	Session 28 - Communication Systems Session Chair: Kohei Arai (Marin)	Session 29 - Internet of Things Session Chair: Brittany Newell (Solano)	Session 30 - Machine Learning Session Chair: Manuel Chiachio Ruano (Larkspur A)
<p>353 – Predicting West Nile Virus (WNV) Occurrences in North Dakota using Data Mining Techniques (Presenter: Mitchell Campion, United States)</p> <p>393 – Data Mining Turbofan Engine Performance to Improve Fuel Efficiency (Presenter: Jerome Lacaille, France)</p> <p>455 – A Framework for Twitter Events Detection, Differentiation and its Application for Retail Brands (Presenter: Olga Kolchyna, United Kingdom)</p> <p>461 – An Intelligent Decision Support System for Private Equity Investment (Presenter: Paul Vroomen, United States)</p> <p>321 – Quality Assurance for Data Science (Presenter: Narada Wickramage, Sri Lanka)</p>	<p>404 – Data Intensive, Computing and Network Aware (DCN) Cloud VMs Scheduling Algorithm (Presenter: Yasser Alharbi, United Kingdom)</p> <p>409 – 5G Networks: Open Network Architecture and Densification Strategies for Beyond 1000x Network Capacity Increase (Presenter: Francis Idachaba, Nigeria)</p> <p>116 – Systematic Literature Review on Effort Estimation for Open Sources (OSS) Web Application Development (Presenter: Tseu Kwan Lee, Malaysia)</p> <p>477 – Experimental Investigation of Amplified Piezoelectric Stack Actuators 50XS, 60S and 120S for the Actuation of Microgrippers (Presenter: Royson Dsouza, United Arab Emirates)</p> <p>127 – Business Intelligence: Self Adapting and Prioritizing Database Algorithm for Providing Big Data Insight in Domain Knowledge and Processing of Volume based Instructions based on Scheduled and Contextual Shifting of Data (Presenter: Mazhar Hameed, Pakistan)</p>	<p>249 – Estimation of Diurnal Bandwidth Requirement using Random Point Process and Product Density (Presenter: Vijayalakshmi Chetlapalli, India)</p> <p>300 – Optimizing Soft Handoff Latency and Access Network Selection for Next Generation Mobile Communication Networks (Presenter: Moses E. Ekpenyong, Nigeria)</p> <p>334 – Considering Near Space Platforms to Close the Coverage Gap in Wireless Communications (Presenter: Faris Almalki, United Kingdom)</p> <p>413 – Network Architecture Model of Infrastructure based Mobile Cognitive Radio System in Licensed Band with Blocking Probability Assessment (Presenter: Neeta Nathani, India)</p> <p>478 – A Two-Channel Level-Order Pipelined Transmission Protocol for Over-the-Air Programming in Wireless Sensor Networks (Presenter: Chi Trung Ngo, South Korea)</p>	<p>424 – Designing an Adaptive Feedback Platform for Encouraging Energy Efficiency Behaviors (Presenter: Henrique Pombeiro, Portugal)</p> <p>427 – An Adaptive I-Parking Application: An Ontology-based Approach (Presenter: Adnane Ghannem, Qatar)</p> <p>432 – A Review of Low Cost and Power Efficient Development Boards for IoT Applications (Presenter: Ataul Ikram, Pakistan)</p> <p>439 – Efficient Energy Solutions, Enabling Smart City Deployment (Presenter: Issa Batarseh, United States)</p> <p>488 – Towards Building Smart Energy Systems in Sub-Saharan Africa (Presenter: Aderemi Atayero, Nigeria)</p>	<p>287 – Application of Multilayer Perceptron Neural Networks and Support Vector Machines in Classification of Healthcare Data (Presenter: Parisa Naraei, Canada)</p> <p>32 – A Bio-inspired Electronic Mechanism for Unsupervised Learning using Structural Plasticity (Presenter: Saeid Barzegarjalali, United States)</p> <p>134 – Predicting the Compressive Strength of Concrete using Neural Network and Kernel Ridge Regression (Presenter: Muhammad Amir Shafiq, United States)</p> <p>136 – Direct Adaptive Inverse Control of Nonlinear Plants using Neural Networks (Presenter: Muhammad Amir Shafiq, United States)</p> <p>146 – Spatial Regularization for Neural Network and Application in Alzheimer's Disease Classification (Presenter: Xin Yang, United States)</p>