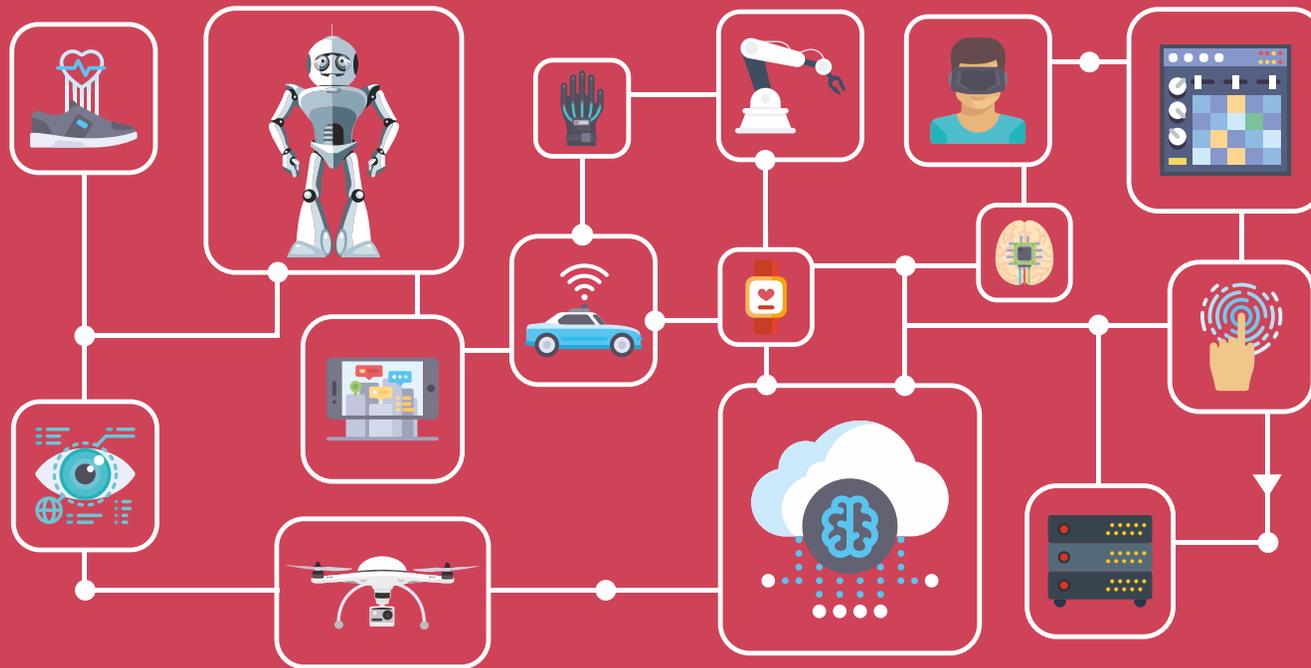


# Future Technologies Conference (FTC) 2017

#FTC2017

November 29-30, 2017, Vancouver, Canada

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## SPONSORS AND PARTNERS



## CONFERENCE VENUE

Pan Pacific Hotel Vancouver  
Suite 300-999 Canada Place, Vancouver  
British Columbia V6C 3B5, Canada

# CONFERENCE AGENDA

## DAY 1 (29<sup>th</sup> November)

- 7:30 am – 8:15 am **Delegates Check-in**
- 8:15 am – 10:30 am **Conference Opening (Oceanview Suite)**
- KEYNOTE TALKS**  
John Martinis, Google  
Peter Mueller, IBM Research  
James Hendler, Rensselaer Polytechnic Institute (RPI)
- 10:30 am – 11:00 am **POSTER PRESENTATIONS (Foyer)**
- 11:00 am – 12:30 pm **PROJECT DEMONSTRATIONS (Oceanview Suite)**
- 12:30 pm – 1:30 pm **Lunch (Cypress Suite)**
- 1:30 pm – 3:30 pm **PAPER PRESENTATIONS**  
Session 1 - Computing  
Session 2 - Software Engineering  
Session 3 - Intelligent Systems  
Session 4 - e-Learning
- 3:30 pm – 3:45 pm **Networking Break (Foyer)**
- 3:45 pm – 6:00 pm **PAPER PRESENTATIONS**  
Session 5 - Communication Systems  
Session 6 - Machine Vision  
Session 7 - Intelligent Systems  
Session 8 - Data Analysis
- 6:00 pm - 7:00 pm **Social Activity - Visit to Flyover Canada**  
(No meals/dinner)

## DAY 2 (30<sup>th</sup> November)

- 8:00 am **Delegates Arrive**
- 8:30 am – 10:30 am **KEYNOTE TALKS (Oceanview Suite)**  
Mohammad S. Obaidat, Fordham University  
Ann Cavoukian, Ryerson University  
Kevin Leyton-Brown, University of British Columbia
- 10:30 am – 11:00 am **Networking Break (Foyer)**
- 11:00 am – 12:30 pm **PAPER PRESENTATIONS**  
Session 9 - Intelligent Systems  
Session 10 - Technology Trends  
Session 11 - Electronics
- 12:30 pm – 1:30 pm **Lunch (Cypress Suite)**
- 1:30 pm – 3:30 pm **PAPER PRESENTATIONS**  
Session 12 - Blockchain  
Session 13 - Ambient Intelligence  
Session 14 - Healthcare Technologies  
Session 15 - Security and Privacy
- 3:30 pm – 3:45 pm **Networking Break (Foyer)**
- 3:45 pm – 5:45 pm **PAPER PRESENTATIONS**  
Session 16 - Ambient Intelligence  
Session 17 - Communication Systems  
Session 18 - Healthcare Technologies  
Session 19 - Security and Privacy
- 5:45 pm – 6:00 pm **Closing Ceremony**

# KEYNOTE SPEAKERS



## John Martinis

Google

**Keynote Title:** Building a Quantum Computer

29th November | 8:30 am - 9:15 am



## Peter Mueller

IBM Zurich Research Laboratory

**Keynote Title:** Quantum Information Processing

29th November | 9:15 am - 9:45 am



## James Hendler

Rensselaer Polytechnic Institute (RPI)

**Keynote Title:** Social Machines: The Coming Collision of Artificial Intelligence, Social Networking, and Humanity

29th November | 9:45 am - 10:15 am



## Mohammad S. Obaidat

Fordham University

**Keynote Title:** Trends and Challenges in Key Enabling Technologies for Smart Homes and Cities

30th November | 8:45 am - 9:15 am



## Ann Cavoukian

Ryerson University

**Keynote Title:** Embedding Privacy into Design: An Essential Feature in IoT and AI

30th November | 9:15 am - 9:45 am



## Kevin Leyton-Brown

University of British Columbia

**Keynote Title:** Modeling Human Strategic Behavior: From Behavioral Economics to Deep Learning

30th November | 9:45 am - 10:15 am

29<sup>th</sup> November (10:30 am - 11:00 am)

POSTER PRESENTATIONS

- 45 - Personalized E-Learning Recommender System using Multimedia Data (Presenter: Hayder Murad, United Kingdom)
- 138 - A Smart Vision System for Monitoring Specialty Crops (Presenter: Duke M Bulanon, United States)
- 204 - Analysis of a Modified OFDM System Minimizing Frequency Offset by Dividing Subchannels (Presenter: Deock-Ho Ha, South Korea)
- 217 - Dual Generators and Double Motors Measurement and Control System (Presenter: Wenlun Cao, China)
- 276 - Exploiting Gaussian Word Embeddings for Document Clustering (Presenter: Patrick Hosein, Trinidad and Tobago)
- 296 - Smart System to Prevent Child Vehicular Heatstroke (Presenter: Dylan Howell, United States)
- 486 - Image Retrieval using Graphs (Presenter: Daniel Valdes Amaro, Mexico)
- 521 - Disaster Relief with Satellite based Synthetic Aperture Radar: SAR (Presenter: Kohei Arai, Japan)
- 100 - Service for Professional Predictive Learning of Skills based on the Patent Analysis of Technologies (Presenter: Evgeny Nikulchev, Russia)
- 322 - Cognitive Analysis of 360 Degree Surround Photos (Presenter: Madhawa Vidanapathirana, Sri Lanka)
- 340 - A Comparative Survey Study on LPWA Networks: LoRa and NB-IoT (Presenter: Emmanuel Migabo, South Africa)
- 156 - Class Engagement Analyzer using Facial Feature Classification (Presenter: Roy Manseras, Philippines)
- 93 - Towards a Constraint-based Approach for Service Aggregation and Selection in Cloud E-Marketplaces (Presenter: Azubuike Ezenwoke, Nigeria)
- 164 - Modeling the NLP Research Domain using Ontologies (Presenter: Randa Hamad Aljably, Saudi Arabia)
- 265 - Implementation of Distance Transformation in the Processing Language (Presenter: Sudhanshu Kumar Semwal)
- 381 - RSI: A High-Efficient and Fault-Tolerant Interconnection for Resources-Pooling in Rack Scale (Presenter: Xiangxi Zou, Jiaqing Xu, China)
- 38 - A Survey of Routing Protocols for Underwater Wireless Sensor Networks (Presenter: Samera Batool, Pakistan)

29<sup>th</sup> November (11:00 am - 12:30 pm)

PROJECT DEMONSTRATIONS

- 469 - Bits and Bricks: Tangible Interactive Matrix for Real-time Computation and 3D Projection Mapping (Presenter: James Ira Winder, United States)
- 88 - Swarm AI to Detect Deceit in Facial Expressions (Presenter: Louis Rosenberg, United States)
- 207 - Amusing Tools for Teaching Lesser-Loved Languages (Presenter: Peter Juel Henrichsen, Denmark)
- 2 - A Novel Use of the Qualtrics Offline App to Collect Comprehensive Student Performance Data for Candidate Assessment and Program Improvement (Presenter: Chris Nicholas Boosalis, United States)
- 245 - Additive Manufacturing and Collaborative Learning for Pre-hospital Care Environment (Presenter: Cody Fell, Marc Ordonez - United States)

## 29<sup>th</sup> NOVEMBER (1:30 pm – 3:30 pm)

### PAPER PRESENTATIONS

<b>Session 1 - Computing</b> Session Chair: Mohammad Obaidat  (Room: Oceanview 5)	<b>Session 2 - Software Engineering</b> Session Chair: Soraya Cardenas  (Room: Oceanview 6)	<b>Session 3 - Intelligent Systems</b> Session Chair: El Sayed Mahmoud  (Room: Oceanview 7)	<b>Session 4 - e-Learning</b> Session Chair: Lori L. Scarlatos  (Room: Oceanview 8)
<p>500 - Toward Quantum Refactoring: Self-Organizing Parallel Resource Mapping with Computation Matrix Transform (Presenter: Liwen Shih, United States)</p> <p>501 - Quantum Leap in Accelerated Computing: The Quest of the Missing Links between Quantum Annealer and HPC (Presenter: Liwen Shih, United States)</p> <p>318 - Task Graph Mapping of General Purpose Applications on a Neuromorphic Platform (Presenter: Indar Sugiarto, United Kingdom)</p> <p>297 - A Green Programming Model for Cloud Software Efficiency (Presenter: Ah-Lian Kor, England)</p> <p>4 - Towards Service Protection in Fog-to-Cloud (F2C) Computing Systems (Presenter: Vitor Barbosa Souza, Spain)</p> <p>490 - Optimization of Multi-Dimensional Metrics through Task Scheduling in Cloud Computing Systems (Presenter: Mohammad Obaidat, United States)</p> <p>79 - Ways of Development of Computer Technologies to Perspective Nano (Presenter: Ekaterina Michailovna Lavrisheva, Russia)</p> <p>203 - Topological Structure for Parallelizing Multicomputer Cluster (Presenter: Deepak Sharma, India)</p>	<p>65 - Herbert Test Helping Hire Software Developers: A Complex Algorithmic Problem Solving Tool (Presenter: Soraya Cardenas, United States)</p> <p>199 - Modeling Trust in the Mobile User Experience: System Quality Characteristics Influencing Trust (Presenter: Philip Lew, United States)</p> <p>446 - Systems Software for Fast Inter-Machine Page Faults (Presenter: Joel Nider, Israel)</p> <p>61 - Goal based Tailoring of Quality Models for Quality Requirements (Presenter: Detlef Streitferdt, Germany)</p> <p>117 - The Effect of Applying Software Design Patterns on Real Time Software Efficiency (Presenter: Wan Nurhayati Wan Ab Rahman, Malaysia)</p> <p>173 - Pair Programming: Collocated Vs. Distributed (Presenter: Mark Rajpal, Canada)</p> <p>515 - Systematic Review of Trends and Gaps in Collaborative Software Engineering in the Cloud (Presenter: Stanley Ewenike, United Kingdom)</p> <p>437 - Defining a DSL for Transmission Pipeline Systems Metamodeling (Presenter: Bunakiye R. Ewenike, Nigeria)</p>	<p>195 - Applying Deep Machine Learning for Psycho-Demographic Profiling of Internet Users using O.C.E.A.N. Model of Personality (Presenter: Iaroslav Omelianenko, Ukraine)</p> <p>219 - Event-B Control Flow Modeling based on iUML-B State Machine (Presenter: Han Peng, China)</p> <p>220 - Evolution in Groups: A Deeper Look at Synaptic Cluster Driven Evolution of Deep Neural Networks (Presenter: Mohammad Javad Shafiee, Canada)</p> <p>237 - Cellular Automaton Based Simulation in Panic and Normal Situations: A Case Study on the University Lecture Hall (Presenter: Fadratul Hafinaz Hassan, Malaysia)</p> <p>238 - Robust Fractional order Power System Stabilizer design using Bacteria Foraging Algorithm for Multi-machine Power System (Presenter: Abraham T Mathew, India)</p> <p>33 - Smartphone based Robust Hierarchical Framework for Activity Recognition based on Machine Learning (Presenter: Muhammad Awais Azam, Pakistan)</p> <p>55 - Visualized Financial Performance Analysis: Self-Organizing Maps (Presenter: Manchuna Shanmuganathan, Canada)</p>	<p>272 - The Virtual Breadboard: Helping Students to Learn Electrical Engineering at a Distance (Presenter: Lori L. Scarlatos, United States)</p> <p>103 - Some Aspects of Teaching Processes Computerization (Presenter: Oliver Moravcik, Slovakia)</p> <p>213 - To Flip or Not to Flip (Presenter: Steven Billis, United States)</p> <p>246 - A Higher Education Experiment to Motivate the Use of Gamification Technique in Agile Development Methodology (Presenter: Rula Al Azawi, Oman)</p> <p>257 - A Framework to Implement a U-Learning Service based on Software-Defined Television (Presenter: Gustavo Moreno Lopez, Colombia)</p> <p>329 - Requirements Model for an Integrated Attendance Monitoring System (IAMS) (Presenter: Joshua C. Nwokeji, United States)</p> <p>332 - Designing Biosecurity Concentration for Interdisciplinary Majors (Presenter: Satyanarayan Dev, United States)</p>

## 29<sup>th</sup> NOVEMBER (3:45 pm – 6:00 pm)

### PAPER PRESENTATIONS

<b>Session 5 - Communication Systems</b> Session Chair: Tariq Jamil  (Room: Oceanview 5)	<b>Session 6 - Machine Vision</b> Session Chair: Jeremiah Johnson  (Room: Oceanview 6)	<b>Session 7 - Intelligent Systems</b> Session Chair: Ah-Lian Kor  (Room: Oceanview 7)	<b>Session 8 - Data Analysis</b> Session Chair: Kohei Arai  (Room: Oceanview 8)
<p>95 - Development of an Android-based Student Information System Application (Presenter: Tariq Jamil, Oman)</p> <p>166 - Software Defined Radio and Long Term Evolution (LTE) for Community Benefit (Presenter: Emil H. Salib, United States)</p> <p>264 - Angular and the Trending Frameworks of Mobile and Web-based Platform Technologies: A Comparative Analysis (Presenter: Mohamed M Sultan, United Kingdom)</p> <p>371 - Scheme to Make MANET Selfheal Stable Routing Protocol (Presenter: C.Jinshong Hwang, United States)</p> <p>5 - Hybridized Optimization Framework for Routing Calls in Call Centres (Presenter: Kingsley C. Ukaoha, Nigeria)</p> <p>256 - Propagation Models Calibration in Mobile Cellular Networks: A Case Study in Togo (Presenter: Koffi. A. Dotche, Togo)</p> <p>430 - Markov Decision Processes for Bitrate Harmony in Adaptive Video Streaming (Presenter: Koffka Khan, Trinidad and Tobago)</p> <p>112 - Spatio-Temporal Proximity Assistance (Presenter: Nadeem Mahmood, Pakistan)</p> <p>21 - Network Traffic Observations in Data Centers and Forecasting Techniques for Resource Utilization (Presenter: Samar Raza Talpur, Ireland)</p>	<p>197 - Neural Style Representations and the Large-Scale Classification of Artistic Style (Presenter: Jeremiah W. Johnson, United States)</p> <p>49 - Crowd Behavior Categorization using Live Stream based on Motion Vector Estimation (Presenter: Sajid Gul Khawaja, Pakistan)</p> <p>64 - Blink Detection for Residential Control (Presenter: Adriano P. Nanes, Clauber De Souza, Diego Yudi Miamoto, Brazil)</p> <p>200 - Building Scale VR (Presenter: Katashi Nagao, Japan)</p> <p>310 - The Role of Camera Convergence in Stereoscopic Video See-through Augmented Reality Displays (Presenter: Vincenzo Ferrari, Italy)</p> <p>317 - Forming a Random Field via Stochastic Cliques: From Random Graphs to Fully Connected Random Fields (Presenter: Mohammad Javad Shafiee, Canada)</p> <p>323 - An Improved Surendra Algorithm for Moving Object Detection (Presenter: Dan Yang, China)</p> <p>333 - Scene Classification Using Hidden Markov Models (Presenter: Lamine Benrais, Algeria)</p> <p>392 - An Edge Based Adaptive Interpolation Algorithm for Image Scaling (Presenter: Wanli Chen, China)</p>	<p>260 - Exploiting Chaos for Fun and Profit (Presenter: Tjeerd olde Scheper, United Kingdom)</p> <p>290 - Iteratively-Reweighted Least-Squares Fitting of Support Vector Machines: A Majorization-Minimization Algorithm Approach (Presenter: Hien D. Nguyen, Australia)</p> <p>358 - An Automated Avoidance Approach for Multiple General-Aviation Conflicts (Presenter: Yousra Almathami, United States)</p> <p>426 - Leveraging Different Learning Rules in Hopfield Nets for Multiclass Classification (Presenter: Arti Arya, Pooja Agarwal, India)</p> <p>481 - Lifting the Veil: Visualizing Sentient Architecture (Presenter: Andreas Bueckle, United States)</p> <p>453 - A Randomized Heuristic Algorithm for Cyclic Routing of UAVs (Presenter: Shell Ying Huang, Singapore)</p> <p>247 - Performance Monitoring of Centrifugal Compressor System using LSTM based Deep RNN (Presenter: Nataraj Paluri, India)</p> <p>250 - Real-Time Control of a 2-DoF Helicopter Via Model Matching H Matrix Modulation Approach (Presenter: Jeevamma Jacob, India)</p>	<p>228 - A Technology Forecasting Framework Enhanced via Twitter Mining (Presenter: Anthony Breitzman, United States)</p> <p>42 - Super Generalized Central Limit Theorem: Limit Distributions for Sums of Non-Identical Random Variables with Power-Laws (Presenter: Masaru Shintani, Japan)</p> <p>63 - An Efficient Data Structure for Fast Join Query Processing (Presenter: Wen-Chi Hou, United States)</p> <p>148 - Intent Detection through Text Mining and Analysis (Presenter: El Sayed Mahmoud, Canada)</p> <p>205 - Building Vocabulary for Big Data Analytics (Presenter: Lyublyana Turiy, United States)</p> <p>284 - I Know What You Felt Last Festival (Presenter: Juandiego Morzan-Samame, Peru)</p> <p>433 - Using PseudoGravity to Attract People (Presenter: Soo Ling Lim, United Kingdom)</p> <p>249 - Reinforced Experience Generator based On Query Nature and Data Bulking (Presenter: Mazhar Hameed, Pakistan)</p>

## 30<sup>th</sup> NOVEMBER (11:00 am – 12:30 pm)

### PAPER PRESENTATIONS

<b>Session 9 - Intelligent Systems</b> Session Chair: El Sayed Mahmoud  (Room: Oceanview 6)	<b>Session 10 - Technology Trends</b> Session Chair: Kohei Arai  (Room: Oceanview 7)	<b>Session 11 - Electronics</b> Session Chair: Ah-Lian Kor  (Room: Oceanview 8)
<p>477 - A wearable general-purpose solution for Human-Swarm Interaction (Presenter: Eduardo Castello Ferrer, United States)</p> <p>277 - Control System of a Terrain Following Quadcopter Under Uncertainty and Input Constraints: A Review and Research Framework (Presenter: Nasser Alqahtani, Canada)</p> <p>315 - A Prototyping of BoBi Secretary Robot (Presenter: Bilan Zhu, Japan)</p> <p>438 - Control of Robotic Crawler Cranes in Tandem Lifting Operations (Presenter: Sima Rishmawi, Palestine)</p> <p>86 - Calculation of Pressure Loss Coefficients in Combining Flows of a Solar Collector using Artificial Neural Networks (Presenter: Imran Shafi, Pakistan)</p> <p>229 - Detecting Cropping Patterns of Underutilized Crops using Online Big Data (Presenter: Ayman Salama Mohamed, Malaysia)</p>	<p>6 - Knowledge Management Metamodel from Social Analysis of Lessons Learned Recorded in the Cloud (Presenter: Yuri Vanessa Nieto Acevedo, Colombia)</p> <p>155 - Quantum Computing in Geometric Algebra Formalism: Light Beam Guide Implementation (Presenter: Alexander Soiguine, United States)</p> <p>225 - Digital Transformation and Industry 4.0 as a Complex and Eclectic Change (Presenter: Christian-Andreas Schumann, Germany)</p> <p>499 - Reliable Innovative Business Model for Online Trading of Machines' Parameters in the Automation and Manufacturing Sector (Presenter: Ghaidaa Shaabany, Germany)</p> <p>400 - Meeting Halfway: Is Driverless-cars the Solution to Saudi Women Driving Ban? (Presenter: Mohammed Alqahtani, Saudi Arabia)</p>	<p>31 - NanoRFID/Computers: Developments and Implications (Presenter: Mario Cardullo, United States)</p> <p>222 - Augmented Efficiency of CLA Logic through Multiple CMOS Configurations (Presenter: Naga Spandana Muppaneni, United States)</p> <p>328 - FSR based Force Myography (FMG) Stability Throughout Non-Stationary Upper Extremity Tasks (Presenter: Mona Lisa Delva, Canada)</p> <p>480 - Reliable High Density Stacked Memristor Memory Designs (Presenter: Selvakumaran Vadivelmurugan, United States)</p> <p>105 - A Cost-Efficient Look-Up Table based Binary Coded Decimal Adder Design (Presenter: Hafiz Md Hasan Babu, Bangladesh)</p>

## 30<sup>th</sup> NOVEMBER (1:30 pm – 3:30 pm)

### PAPER PRESENTATIONS

<b>Session 12 - Blockchain</b> Session Chair: Thomas Portegys  (Room: Oceanview 5)	<b>Session 13 - Ambient Intelligence</b> Session Chair: Mohamed Sultan  (Room: Oceanview 6)	<b>Session 14 - Healthcare Technologies</b> Session Chair: El Sayed Mahmoud  (Room: Oceanview 7)	<b>Session 15 - Security and Privacy</b> Session Chair: Kohei Arai  (Room: Oceanview 8)
<p>76 - Coinspermia: A Cryptocurrency Unchained (Presenter: Tom Portegys, United States)</p> <p>44 - Blockchain and Git Repositories for Sticky Policies Protected OOXML (Presenter: Grzegorz Spyra, United Kingdom)</p> <p>127 - User-Controlled Privacy-Preserving User Profile Data Sharing based on Blockchain (Presenter: Ajay Kumar Shrestha, Canada)</p> <p>279 - Blockchain and Distributed Ledgers as Trusted Recordkeeping Systems (Presenter: Victoria L. Lemieux, Canada)</p> <p>402 - Modeling Smart Contracts Activities: A Tensor based Approach (Presenter: Jeremy Charlier, Luxembourg)</p> <p>425 - Blockchain based Wine Supply Chain Traceability System (Presenter: Vallipuram Muthukkumarasamy, Australia)</p> <p>476 - The Blockchain: A New Framework for Robotic Swarm Systems (Presenter: Eduardo Castello Ferrer, United States)</p> <p>491 - Towards Secure Interoperability between Heterogeneous Blockchains using Smart Contracts (Presenter: Gaby G. Dagher, United States)</p>	<p>211 - A New Concept of a Generic Co-Simulation Platform for Energy Systems Modeling (Presenter: Jianlei Liu, Germany)</p> <p>224 - Can Blockchain Protect Internet-of-Things? (Presenter: Hiroshi Watanabe, Taiwan)</p> <p>241 - A Preliminary Investigation into Infrared Sensors in Wearables for Upper Extremity Motion Sensing (Presenter: Jordan Lui, Canada)</p> <p>266 - Intelligent Elevators in a Smart Building (Presenter: Vasileios Zarikas, Kazakhstan)</p> <p>307 - Knowledge Mining Architecture for Localized Optimization of Smart Heating Systems (Presenter: Bolatzhon Kumalakov, Kazakhstan)</p> <p>313 - Detection and Recognition of Sign Language Protocol using Motion Sensing Device (Presenter: Aoxuan Li, China)</p> <p>240 - Microgrid Stability Improvement by Optimization of Virtual Droop Control (Presenter: Elizabeth P Cheriyan, India)</p>	<p>149 - Cost-Effective System for the Classification of Muscular Intent using Surface Electromyography and Artificial Neural Networks (Presenter: Anmol Khanna, United Arab Emirates)</p> <p>267 - Future Augmented Reality in Endosurgery (Presenter: Bojan Nokovic, Canada)</p> <p>288 - ECG Abnormality Detection Algorithm (Presenter: Mahmoud Al Ahmad, United Arab Emirates)</p> <p>489 - Multi-class Alzheimer Disease Classification using Hybrid Features (Presenter: Syed Muhammad Anwar, Pakistan)</p> <p>397 - Interface of an Automatic Recognition System for Dysarthric Speech (Presenter: Fares Zaidi, Algeria)</p> <p>308 - An Intelligent Session Transition System Towards Low Power Walking Step Estimation (Presenter: Dipankar Das, India)</p> <p>309 - A Musical Guidance System for Ergogenic Benefits in Workouts (Presenter: Prakhayth Kumar Hegde, India)</p>	<p>3 - An SDN-based Architecture for Security Provisioning in Fog-to-Cloud (F2C) Computing Systems (Presenter: Sarang Kahvazadeh, Spain)</p> <p>62 - The Relationship between Biometric Technology and Privacy: A Systematic Review (Presenter: Zibusiso Dewa, United Kingdom)</p> <p>89 - Secure Fast Fourier Transform using Fully Homomorphic Encryption (Presenter: Thomas Shortell, United States)</p> <p>151 - Text Dependent Voice Recognition System using MFCC and VQ for Security Applications (Presenter: Senthil Arumugam Muthukumaraswamy, United Arab Emirates)</p> <p>152 - A Novel Scan2Pass Architecture for Enhancing Security towards E Commerce (Presenter: Hamzah F. Zmezm, Malaysia)</p> <p>202 - Piezoelectric based Biosignal Transmission using Xbee (Presenter: Mahmoud Al Ahmad, United Arab Emirates)</p> <p>239 - Distortion Search – A Web Search Privacy Heuristic (Presenter: Kato Mivule, United States)</p> <p>70 - Continuous Authentication in Smartphones: An Analysis on Robust Security Practices (Presenter: Munam Ali Shah, Pakistan)</p>

## 30<sup>th</sup> NOVEMBER (3:45 pm – 5:45 pm)

### PAPER PRESENTATIONS

<b>Session 16 - Ambient Intelligence</b> Session Chair: Mohamed Sultan  (Room: Oceanview 5)	<b>Session 17 - Communication Systems</b> Session Chair: Mohammad Obaidat  (Room: Oceanview 6)	<b>Session 18 - Healthcare Technologies</b> Session Chair: Ah-Lian Kor  (Room: Oceanview 7)	<b>Session 19 - Security and Privacy</b> Session Chair: Thomas Portegys  (Room: Oceanview 8)
<p>346 - Wireless Sensor for Monitoring Acoustic Induced Vibration (Presenter: Khalid Elawad, United States)</p> <p>385 - A Cooperative Human-Machine Interaction Warning Strategy for the Semi-Autonomous Driving Context (Presenter: Pedro Arezes, Portugal)</p> <p>396 - Fog-to-Cloud (F2C) Data Management for Smart Cities (Presenter: Amir Sinaeepourfard, Spain)</p> <p>472 - Personal Food Computer: A New Device for Controlled-Environment Agriculture (Presenter: Eduardo Castello Ferrer, United States)</p> <p>452 - CR-MEGA: Mutually Exclusive Guaranteed Access Control for Cognitive Radio Networks (Presenter: Shafiq Muhammad, South Korea)</p> <p>325 - Blended Cryptography for Secured Data Transfer in Medical IoT Devices (Presenter: Revanesh Mayigaiah, India)</p> <p>409 - Machine Learning-based Advanced Localization Method in Wireless Communication (Presenter: San Hlaing Myint, Japan)</p>	<p>510 - Implementation and Performance Analysis of Probabilistic Cognitive Relaying Communication Demo (Presenter: Amith Khandakar, Qatar)</p> <p>502 - Stochastic Power Modeling of Wireless Sensor Networks for Mission Critical Systems (Presenter: Mohammad Obaidat, United States)</p> <p>473 - Low Computational Complexity of SC Polar Decoder in MIMO Fading Channel (Presenter: Alaa Hasan, Canada)</p> <p>331 - Performance Evaluation of Real Time MIMO testBED using NI-2922 Universal Software Radio Peripheral (Presenter: Aliyu Buba Abdullahi, United Kingdom)</p> <p>484 - Data Communication Quality in Mobile Broadband Access Networks: Radio Propagation Environment Impact and End-User Achievements (Presenter: Anthony Osaigbovo Igbino, Nigeria)</p> <p>488 - Response-Aware Scheduling of Big Data Applications in Cloud Environments (Presenter: Mohammad Obaidat, United States)</p>	<p>517 - Isolating Bone and Gray Matter in MRI Images using 3D Slicer (Presenter: Ashley Whiteside, United States)</p> <p>468 - Architecting and Building the Future of Healthcare Informatics: Cloud, Containers, Big Data and CHIPS (Presenter: Rudolph Pienaar, United States)</p> <p>487 - Evaluation of Soft Tissue Variations using a 3D Scanning System for Orthodontic Applications (Presenter: Cristiane Schmitz, Brazil)</p> <p>423 - Implementation of Data Mining from Social Media for Improved Public Health Care (Presenter: Mohammed Saeed Jawad, Malaysia)</p> <p>336 - Application of Business Intelligence Techniques Using SAS on Open Data: Analysing Health Inequality in English Regions (Presenter: Ah-Lian Kor, England)</p> <p>410 - Design and Development of Non-Invasive Prototype to Measure Pulse Rate, Blood Glucose and Oxygen Saturation Level in Arterial Blood (Presenter: Nazo Haroon, Pakistan)</p> <p>444 - Prediction of Musical Perception using EEG and Functional Connectivity in the Brain (Presenter: Lavanya Krishna, India)</p>	<p>254 - Sensor-based Ransomware Detection (Presenter: Michael A. Taylor, United States)</p> <p>271 - A Novel Biometric based on Neural Representations of Synergistic Hand Grasps (Presenter: Ramana Vinjamuri, Vrajeshri Patel, United States)</p> <p>274 - Security Threats and Techniques in Social Networking Sites: A Systematic Literature Review (Presenter: Azah Anir Norman, Malaysia)</p> <p>347 - Management of Privacy When Photos and Videos are Stored or Shared (Presenter: Srinivas Madhisetty, Australia)</p> <p>393 - Secure Two-Factor Authentication with SwissPass Crypto Card: A Case Study (Presenter: Annett Laube, Switzerland)</p> <p>398 - Identifying and Scoring Vulnerability in SCADA Environments (Presenter: Parves Kamal, United States)</p> <p>485 - Achieving Flatness: Honeywords Generation Method for Passwords based on User Behaviours (Presenter: Ahmed F. Makki, Canada)</p>