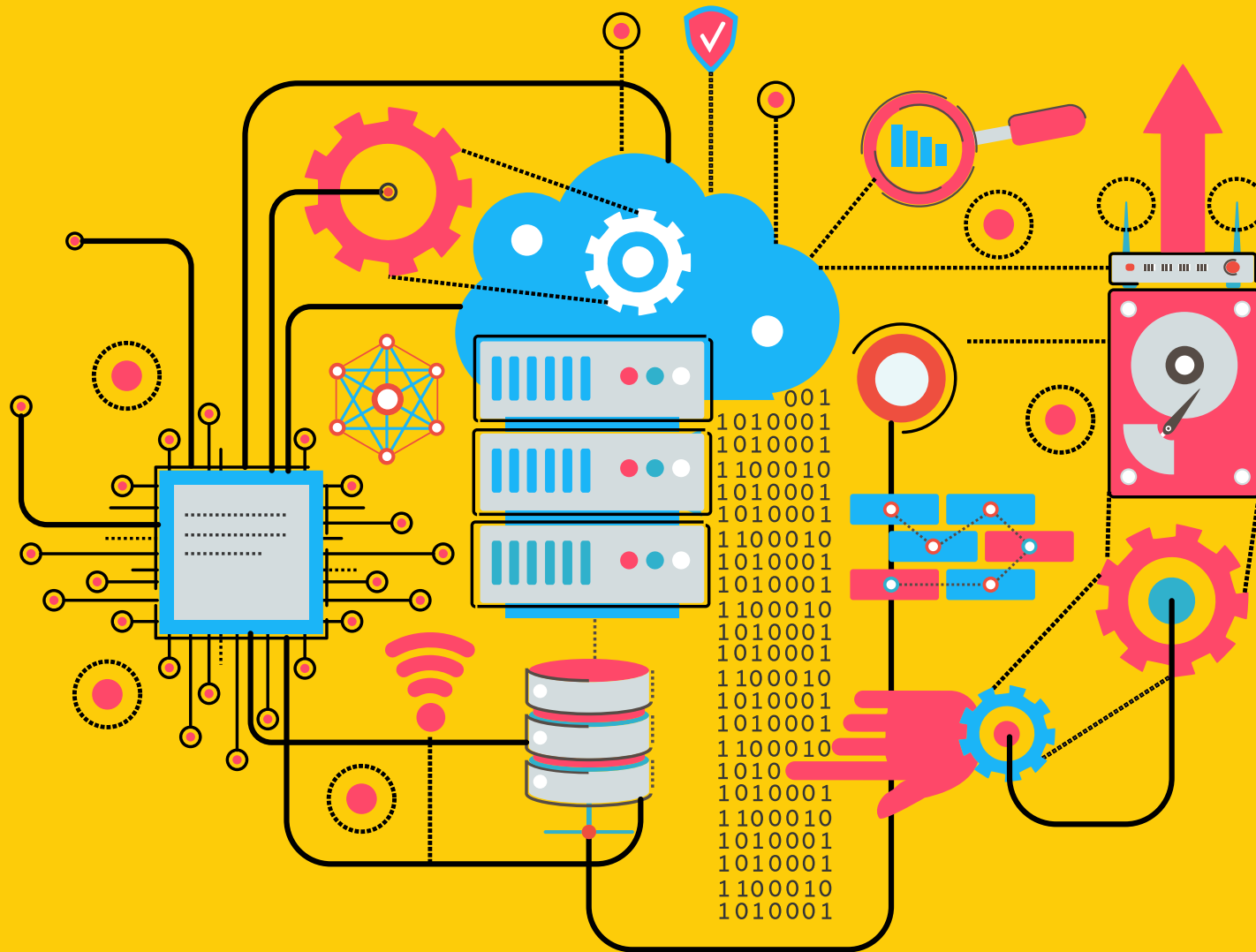


Future of Information and Communication Conference 2019

14-15 March 2019, San Francisco



○----- CONFERENCE AGENDA -----○

CONFERENCE AGENDA

DAY 1 (14th March)

- 8:00 am – 8:30 am **Delegates Check-in**
- 8:30 am – 10:15 am **KEYNOTE TALKS**
Cathy Pearl, Google
Klaus Doppler, Nokia Bell Labs
- 10:15 am – 10:45 am **POSTERS/ NETWORKING BREAK**
- 10:45 am - 12:45 pm **PAPER PRESENTATIONS**
Session 1 - Communication
Session 2 - Ambient Intelligence
Session 3 - Data Science
- 12:45 pm – 1:30 pm **LUNCH**
- 1:30 pm – 3:30 pm **PAPER PRESENTATIONS**
Session 4 - Communication
Session 5 - Computing
Session 6 - Data Science
- 3:30 pm - 3:45 pm **NETWORKING BREAK**
- 3:45 pm – 5:45 pm **PAPER PRESENTATIONS**
Session 7 - Internet of Things
Session 8 - Computing
Session 9 - Networking

DAY 2 (15th March)

- 8:00 am – 8:30 am **Delegates Arrive**
- 8:30 am – 10:30 am **KEYNOTE TALKS**
Pascal Lorenz, University of Haute Alsace
Chuck Easttom, Computer Science Consultant
David L. Tennenhouse, Vmware
- 10:30 am – 10:45 am **POSTERS/ NETWORKING BREAK**
- 10:45 am – 12:45 pm **PAPER PRESENTATIONS**
Session 10 - Data Science
Session 11 - Machine Learning
Session 12 - Security and Privacy
- 12:45 pm – 1:30 pm **LUNCH**
- 1:30 pm – 3:30 pm **PAPER PRESENTATIONS**
Session 13 - Human-centric Computing
Session 14 - Machine Learning
Session 15 - Security and Privacy
- 3:30 pm – 3:45 pm **NETWORKING BREAK**
- 3:45 pm – 5:45 pm **PAPER PRESENTATIONS**
Session 16 - Data Science
Session 17 - Machine Learning
Session 18 - Security and Privacy
- 5:45 pm – 6:00 pm **Closing Ceremony**

14th March 2019 (10:45 am - 12:45 pm)

PAPER PRESENTATIONS

Session 1 - Communication Session Chair: Pascal Lorenz (Room: Franciscan)	Session 2 - Ambient Intelligence Session Chair: Abey Campbell (Room: Stanford)	Session 3 - Data Science Session Chair: Zeeshan Ahmed (Room: City)
<p>61 - Visible Light Communication Security Vulnerabilities in Multiuser Network (Presenter: Rana Shaaban)</p> <p>246 - Mitigating the Nonlinear Optical Fiber Using Dithering and APD Coherent Detection on Radio Over Fiber (Presenter: Fakhriy Hario)</p> <p>322 - MAC Protocols for Wireless Mesh Networks with Multi-beam Antennas: A Survey (Presenter: Gang Wang)</p> <p>321 - NavAssist-Intelligent Landmark Based Navigation System (Presenter: Ratnakumar Madhushan)</p> <p>320 - An Enhanced RSSI-Based Detection Scheme for Sybil Attack in Wireless Sensor Networks (Presenter: Yinghong Liu)</p> <p>32 - The Applications of Model Driven Architecture (MDA) in Wireless Sensor Networks (WSN): Techniques and Tools (Presenter: Muazzam A. Khan Khattak)</p> <p>224 - 5G Waveform Competition: Performance Comparison and Analysis of OFDM and FBMC in Slow Fading and Fast Fading Channels (Presenter: Muhammad Imran)</p> <p>55 - Real Time Multiuser-MIMO Beamforming/Steering Using NI-2922 Universal Software Radio Peripheral (Presenter: Aliyu Buba Abdullahi)</p>	<p>203 - Enabling Pedestrian Safety Using Computer Vision Techniques: A Case Study of the 2018 Uber Inc. Self-driving Car Crash (Presenter: Puneet Kohli)</p> <p>355 - Towards Improved Drink Volume Estimation Using Filter-Based Feature Selection (Presenter: Henry Griffith)</p> <p>201 - The Artificial Intelligence Application in the Management of Contemporary Organization (Presenter: Leszek Ziora, Dorota Jelonek, Agata Mesjasz-Lech, Tomasz Turek)</p> <p>31 - CityAction a Smart-City Platform Architecture (Presenter: Paulo Tomé)</p> <p>190 - Simplified Neural Networks with Smart Detection for Road Traffic Sign Recognition (Presenter: Jar-Ferr Yang)</p> <p>191 - Weighted Histogram of Oriented Uniform Gradients for Moving Object Detection (Presenter: Wei-Jong Yang)</p> <p>325 - Coordinated Scheduling of Fuel Cell-Electric Vehicles and Solar Power Generation Considering Vehicle to Grid Bidirectional Energy Transfer Mode (Presenter: Bassam Zafar)</p> <p>177 - Optimization of Bus Service with a Spatio-Temporal Transport Pulsation Model (Presenter: Shuhan Lou)</p>	<p>24 - Empirical Similarity for Absent Data Generation in Imbalanced Classification (Presenter: Arash Pourhabib)</p> <p>117 - Systematically Dealing Practical Issues Associated to Healthcare Data Analytics (Presenter: Zeeshan Ahmed)</p> <p>241 - LDM: Lineage-Aware Data Management in Multi-tier Storage Systems (Presenter: Arun Somani)</p> <p>127 - Towards Optimizing Data Analysis for Multi-dimensional Data Sets (Presenter: Yong Shi)</p> <p>56 - MMORPG Player Classification Using Game Data Mining and K-means (Presenter: Bruno Odierna)</p> <p>137 - Clustering of Economic Data with Modified K-Mean Technique (Presenter: Trung Pham)</p> <p>155 - Analysis of Data Governance Implications on Big Data (Presenter: Johannes Cronje, Lomso Trom)</p> <p>270 - A Personalized Blood Pressure Prediction Model Using Recurrent Kernel Extreme Reservoir Machine (Presenter: Sundus Abrar)</p>

14th March 2019 (01:30 pm - 03:30 pm)

PAPER PRESENTATIONS

Session 4 - Communication Session Chair: Pascal Lorenz (Room: Franciscan)	Session 5 - Computing Session Chair: Glenn Fiedelholz (Room: Stanford)	Session 6 - Data Science Session Chair: Marilena Oita (Room: City)
<p>80 - Accurate Attitude Estimation for Drones in 5G Drone Small Cells (Presenter: Vahid Vahidi)</p> <p>144 - Existence of an Optimal Perpetual Gossiping Scheme for Arbitrary Networks (Presenter: Ivan Avramovic)</p> <p>146 - How to Achieve Traffic Safety with LTE and Edge Computing (Presenter: Stefan Neumeier)</p> <p>261 - Expanding Coverage of an Intelligent Transit Bus Monitoring System via ZigBee Radio Network (Presenter: Ahmad Salman)</p> <p>110 - Optimization of Polar Codes in Virtual MIMO Systems (Presenter: Papis Ndiaye)</p> <p>164 -Review of Paradigm Shift in Patent Within Digital Environment and Possible Implications for Economic Development in Africa (Presenter: Odirachukwu Mwim)</p>	<p>251 - Artificial Swarming Shown to Amplify Accuracy of Group Decisions in Subjective Judgement Tasks (Presenter: Louis Rosenberg)</p> <p>51 - Human Superposition Allows for Large-Scale Quantum Computing (Presenter: Bruce Levinson)</p> <p>57 - Student User Experience with the IBM QISKit Quantum Computing Interface (Presenter: Avery Leider, Preeti Dalvi, Karl Peterson)</p> <p>233 - A Secure Scalable Life-Long Learning Based on Multiagent Framework Using Cloud Computing (Presenter: Chu Kiong Loo)</p> <p>193 - SuperDense Coding Step by Step (Presenter: Avery Leider, Lewis Westfall)</p> <p>33 - Bioinformatics Tools for PacBio Sequenced Amplicon Data Pre-processing and Target Sequence Extraction (Presenter: Zeeshan Ahmed)</p> <p>263 - eSense 2.0: Modeling Multi-agent Biomimetic Predation with Multi-layered Reinforcement Learning (Presenter: D. Michael Franklin)</p> <p>112 - Enterprises and Future Disruptive Technological Innovations (Presenter: Hock Chuan Lim)</p>	<p>249 - Potential Data Sources for Sentiment Analysis Tools for Municipal Management Based on Empirical Research (Presenter: Leszek Ziara, Dorota Jelonek, Agata Mesjasz-Lech, Tomasz Turek)</p> <p>199 - Predicting Human Position Using Improved Numerical Association Analysis for Bioelectric Potential Data (Presenter: Imam Tahyudin)</p> <p>206 - Design of an Analysis Guide for User-Centered Process Mining Projects (Presenter: Yaimara Céspedes-González)</p> <p>302 - Crime Alert! Crime Typification in News Based on Text Mining (Presenter: Miguel Nuñez del Prado)</p> <p>328 - Classification Model for Student Performance Amelioration (Presenter: Stewart Muchuchuti)</p> <p>335 - Towards Enhancing Historical Analogy: Clustering Users Having Different Aspects of Events (Presenter: Ryohei Ikejiri)</p> <p>351 - Educational Database Analysis Using Simple Bayesian Classifier (Presenter: Byron Oviedo)</p> <p>287 - Internet of Things Based Smart Community Design and Planning Using Hadoop-Based Big Data Analytics (Presenter: Muhammad Babar)</p>

14th March 2019 (03:45 pm - 05:45 pm)

PAPER PRESENTATIONS

Session 7 - Internet of Things Session Chair: Bruce Levinson (Room: Franciscan)	Session 8 - Computing Session Chair: Glenn Fiedelholz (Room: Stanford)	Session 9 - Networking Session Chair: Miaomiao Zhang (Room: City)
<p>256 – From Smart Concept to User Experience Practice a Synthetic Model of Reviewed and Organized Issues to Conceive Qualified Interactions (Presenter: Cristina Caramelo Gomes)</p> <p>318 – Democratization of Intelligent Sensor Network for Low-Connected Remote Healthcare Facilities (Presenter: Anitha Ilapakurti)</p> <p>40 – Smart and Pervasive Health Systems—Challenges, Trends, and Future Directions (Presenter: Ramesh Rajagopalan)</p> <p>202 – Latency-Aware Distributed Resource Provisioning for Deploying IoT Applications at the Edge of the Network (Presenter: Cosmin Avasalcai, Shahram Dustdar)</p> <p>46 – CityBook: A Mobile Crowdsourcing and Crowdsensing Platform (Presenter: Gilberto Marzano, Velta Lubkina)</p> <p>222 – A Framework for a Fuzzy Smart Home IoT e-Health Support System (Presenter: Moses Agana)</p> <p>71 – Identification of Remote IoT Users Using Sensor Data Analytics (Presenter: Muazzam A. Khan Khattak)</p> <p>34 – IntelliEppi: Intelligent Reaction Monitoring and Holistic Data Management System for the Molecular Biology Lab (Presenter: Zeeshan Ahmed)</p>	<p>58 – An Autonomic Model-Driven Architecture to Support Runtime Adaptation in Swarm Behavior (Presenter: Mark Allison)</p> <p>38 – Interruption Timing Prediction via Prosodic Task Boundary Model for Human-Machine Teaming (Presenter: Nia Peters)</p> <p>141 – SimTee: An Automated Environment for Simulation and Analysis of Requirements (Presenter: Saad Zafar)</p> <p>196 – High-Resolution Streaming Functionality in SAGE2 Screen Sharing (Presenter: Kazuya Ishida)</p> <p>145 – *Thing: Improve Anything to Anything Collaboration (Presenter: Roberto Guidi, Luca Ambrosini)</p> <p>181 – Hierarchical Modeling for Strategy-Based Multi-agent Multi-team Systems (Presenter: D. Michael Franklin)</p> <p>54 – Computer Science Education: Online Content Modules and Professional Development for Secondary Teachers in West Tennessee (Presenter: Lee Allen)</p> <p>331 – System of Organizational Terms as a Methodological Concept in Replacing Human Managers with Robots (Presenter: Olaf Flak)</p>	<p>159 – Routing Sets and Hint-Based Routing (Presenter: Ivan Avramovic)</p> <p>301 – Comparison between Maximal Independent Sets and Maximal Cliques Models to Calculate the Capacity of Multihop Wireless Networks (Presenter: Jingpeng Li)</p> <p>260 – A Priority and QoS-Aware Scheduler for LTE Based Public Safety Networks (Presenter: Mahir Ayhan)</p> <p>259 – Efficient Mobile Base Station Placement for First Responders in Public Safety Networks (Presenter: Chen Shen)</p> <p>312 – Solutions of Partition Function-Based TU Games for Cooperative Communication Networking (Presenter: Giovanni Rossi)</p> <p>37 – Searching for Network Modules (Presenter: Giovanni Rossi)</p> <p>175 – Interoperable Convergence of Storage, Networking, and Computation (Presenter: Micah Beck)</p> <p>354 – QoS for SDN-Based Fat-Tree Networks (Presenter: Haitham Ghalwash)</p> <p>128 – LBMM: A Load Balancing Based Task Scheduling Algorithm for Cloud (Presenter: Yong Shi)</p>

15th March 2019 (10:45 am - 12:45 pm)

PAPER PRESENTATIONS

<p>Session 10 - Data Science Session Chair: Douglas Galarus (Room: Franciscan)</p>	<p>Session 11 - Machine Learning Session Chair: Zeeshan Ahmed (Room: Stanford)</p>	<p>Session 12 - Security and Privacy Session Chair: Miaomiao Zhang (Room: City)</p>
<p>295 - SPARQ λ : SPARQL as a Function (Presenter: Christian Vogelgesang)</p> <p>162 - A Marketing Game: A Model for Social Media Mining and Manipulation (Presenter: Matthew Reyes)</p> <p>104 - Accurate, Timely, Reliable: A High Standard and Elusive Goal for Traveler Information Data Quality (Presenter: Douglas Galarus)</p> <p>4 - Two Approaches to Country Risk Evaluation (Presenter: Ramin Rzayev)</p> <p>230 - Conceptual Model for the New Generation of Data Warehouse System Catalog (Presenter: Danijela Jaksic)</p> <p>197 - Towards the Processes Discovery in the Medical Treatment of Mexican-Origin Women Diagnosed with Breast Cancer (Presenter: Guillermo Molero-Castillo)</p> <p>336 - A Holistic Approach to Requirements Elicitation for Mobile Tourist Recommendation Systems (Presenter: Andreas Gregoriades)</p> <p>285 - A Chronicle Review of Code Mixing and Switching or Language Exchanging in Punjabi Movie Names (Presenter: Deepak Sharma)</p>	<p>214 - Contextual Binding: A Deductive Apparatus in Artificial Neural Networks (Presenter: Jim Chen)</p> <p>44 - Intelligent Signal Classifier for Brain Epileptic EEG Based on Decision Tree, Multilayer Perceptron and Over-Sampling Approach (Presenter: Meng-Hsiun Tsai)</p> <p>253 - CASCADENET: An LSTM Based Deep Learning Model for Automated ICD-10 Coding (Presenter: Sheikh shams Azam)</p> <p>304 - Automated Gland Segmentation Leading to Cancer Detection for Colorectal Biopsy Images (Presenter: Ammara Nasim)</p> <p>120 - Korean-Optimized Word Representations for Out-of-Vocabulary Problems Caused by Misspelling Using Sub-character Information (Presenter: Seonghyun Kim)</p> <p>131 - A Regressive Convolution Neural Network and Support Vector Regression Model for Electricity Consumption Forecasting (Presenter: Youshan Zhang)</p> <p>244 - Facial Expression Recognition and Analysis of Interclass False Positives Using CNN (Presenter: Junaid Baber)</p> <p>340 - A Two-Fold Machine Learning Approach for Efficient Day-Ahead Load Prediction at Hourly Granularity for NYC (Presenter: Raghavendran Thiruvengadam)</p>	<p>15 - Exploiting Telnet Security Flaws in the Internet of Things (Presenter: James Klein)</p> <p>111 - Probabilistic Full Disclosure Attack on IoT Network Authentication Protocol (Presenter: Madiha Khalid, Umar Khokhar)</p> <p>129 - Multilevel Data Concealing Technique Using Steganography and Visual Cryptography (Presenter: Chaitra Rangaswamaiah)</p> <p>152 - Ring Theoretic Key Exchange for Homomorphic Encryption (Presenter: Jack Aiston)</p> <p>286 - Response-Based Cryptographic Methods with Ternary Physical Unclonable Functions (Presenter: Bertrand Cambou)</p> <p>288 - Implementation of Insider Threat Detection System Using Honeypot Based Sensors and Threat Analytics (Presenter: Muhammad Mudassar Yamin)</p> <p>305 - Subject Identification from Low-Density EEG-Recordings of Resting-States: A Study of Feature Extraction and Classification (Presenter: Luis Alfredo Moctezuma)</p> <p>308 - Early Detection of Mirai-Like IoT Bots in Large-Scale Networks through Sub-sampled Packet Traffic Analysis (Presenter: Ayush Kumar)</p>

15th March 2019 (01:30 pm - 03:30 pm)

PAPER PRESENTATIONS

<p>Session 13 - Human-centric Computing Session Chair: Bruce Levinson</p> <p>(Room: Franciscan)</p>	<p>Session 14 - Machine Learning Session Chair: Marilena Oita</p> <p>(Room: Stanford)</p>	<p>Session 15 - Security and Privacy Session Chair: Thaier Hayajneh</p> <p>(Room: City)</p>
<p>169 - Uses of Virtual Reality for Communication in Financial Services: A Case Study on Comparing Different Telepresence Interfaces: Virtual Reality Compared to Video Conferencing (Presenter: Abey Campbell)</p> <p>309 - Effects of Virtual Agent Gender on User Performance and Preference in a VR Training Program (Presenter: Xiumin Shang)</p> <p>18- The Psychoinformatic Complexity of Humanness and Person-Situation Interaction (Presenter: Suraj Sood)</p> <p>53 -Improving a Design Space: Pregnancy as a Collaborative Information and Social Support Ecology (Presenter: Tamara Peyton)</p> <p>166 - Image Gravity: Defining Spatial Constructs for Invisible Phenomena (Presenter: Dana Karwas)</p> <p>48 - Evaluation of Accuracy: A Comparative Study Between Touch Screen and Midair Gesture Input (Presenter: Zeeshan Haider Malik)</p>	<p>133 - Comparing TensorFlow Deep Learning Performance and Experiences Using CPUs via Local PCs and Cloud Solutions (Presenter: Robert Nardelli, Zachary Dall)</p> <p>134 - ScaffoldNet: Detecting and Classifying Biomedical Polymer-Based Scaffolds via a Convolutional Neural Network (Presenter: Xavier-Lewis Palmer)</p> <p>294 - Automating Vehicles by Deep Reinforcement Learning Using Task Separation with Hill Climbing (Presenter: Mogens Graf Plessen)</p> <p>84 - Information Augmentation, Reduction and Compression for Interpreting Multi-layered Neural Networks (Presenter: Ryotaro Kamimura)</p> <p>43 - Quantum Deep Learning Neural Networks (Presenter: Avery Leider, Yousef Alhwaiti)</p> <p>346 - A Classical-Quantum Hybrid Approach for Unsupervised Probabilistic Machine Learning (Presenter: Prasanna Date)</p> <p>311 - Adaptive Packet Routing on Communication Networks Based on Reinforcement Learning (Presenter: Surajate On-rit)</p> <p>119 - Transfer Learning for Cross-Domain Sequence Tagging Tasks (Presenter: Dancheng Li, Meng Cao, Chaohe Zhang)</p>	<p>348 - Desktop Browser Extension Security and Privacy Issues (Presenter: Thaier Hayajneh)</p> <p>105 - Assessing the Performance of a Biometric Mobile Application for Workdays Registration (Presenter: Cristian Zambrano Vega)</p> <p>267 - From Access Control Models to Access Control Metamodels: A Survey (Presenter: Nadine Kashmar)</p> <p>315 - A Potential Cascading Succession of Cyber Electromagnetic Achilles' Heels in the Power Grid (Presenter: S. Chan)</p> <p>265 - On the Relation Between Security Models for HB-like Symmetric Key Authentication Protocols (Presenter: Miaomiao Zhang)</p> <p>17 - Exploring Cybersecurity Metrics for Strategic Units: A Generic Framework for Future Work (Presenter: Mohammed Arafah)</p> <p>29 - Privacy and Security—Limits of Personal Information to Minimize Loss of Privacy (Presenter: Shah Nazir)</p> <p>85 - Towards Protection Against a USB Device Whose Firmware Has Been Compromised or Turned as 'BadUSB' (Presenter: Usman Shafique)</p>

15th March 2019 (03:45 pm - 05:45 pm)

PAPER PRESENTATIONS

<p>Session 16 - Data Science Session Chair: Douglas Galarus (Room: Franciscan)</p>	<p>Session 17 - Machine Learning Session Chair: Zeeshan Ahmed (Room: Stanford)</p>	<p>Session 18 - Security and Privacy Session Chair: Thaier Hayajneh (Room: City)</p>
<p>216 - Acoustic Event Detection with Sequential Attention and Soft Boundary Information (Presenter: Xianjun Xia)</p> <p>268 - Statistical Prediction of High-Cost Claimants Using Commercial Health Plan Data (Presenter: Amy Cao)</p> <p>91 - A Track Fuzzy Control of Robot Manipulator with Elastic Links (Presenter: Nguyen Hoang Mai)</p> <p>113 - Development and Initial Validation of the Big Data Framework for Agile Business: Transformational Innovation Initiative (Presenter: Bhuvan Unhelkar)</p> <p>179 - Estimation Model Based on Spectral-Reflectance Data (Presenter: Tao Chi)</p> <p>151 - Ethics in Analytics and Social Media (Presenter: Ed Lindoo)</p> <p>198 - The Effects of the Number of Chinese Visitors on Commercial Sales in Japan (Presenter: Koki Kyo)</p> <p>236 - Preliminary Multi-lingual Evaluation of a Question Answering System Based on the Node of Knowledge Method (Presenter: Sanja Candrljic)</p>	<p>326 - Reverse Engineering Creativity into Interpretable Neural Networks (Presenter: Marilena Oita)</p> <p>42 - Developing a Deep Learning Model to Implement Rosenblatt's Experiential Memory Brain Model (Presenter: Abu Kamruzzaman)</p> <p>189 - Edit Distance Kernelization of NP Theorem Proving for Polynomial-Time Machine Learning of Proof Heuristics (Presenter: David Windridge)</p> <p>154 - Enhance Rating Algorithm for Restaurants (Presenter: Jeshreen Balraj)</p> <p>300 - The Influence of Media Types on Students' Learning Performance in a Role Playing Game on English Vocabulary Learning (Presenter: Jing Leng)</p> <p>240 - Performance Analysis of Artificial Neural Networks Training Algorithms and Activation Functions in Day-Ahead Base, Intermediate, and Peak Load Forecasting (Presenter: Lemuel Clark Velasco)</p> <p>130 - Ensemble Models for Enhancement of an Arabic Speech Emotion Recognition System (Presenter: Rached Zantout)</p> <p>45 - An Efficient Segmentation Technique for Urdu Optical Character Recognizer (OCR) (Presenter: Farhan Aadil)</p>	<p>156 - Closer Look at Mobile Hybrid Apps Configurations: Statistics and Implications (Presenter: Abeer Al Jarrah)</p> <p>338 - Securing a Network: How Effective Using Firewalls and VPNs Are? (Presenter: Zhang Zhipeng)</p> <p>100 - A Software Engineering Methodology for Developing Secure Obfuscated Software (Presenter: Carlos Gonzalez)</p> <p>126 - Detecting Windows Based Exploit Chains by Means of Event Correlation and Process Monitoring (Presenter: Muhammad Mudassar Yamin)</p> <p>142 - Analysing Security Threats for Cyber-Physical Systems (Presenter: Shafiq Rehman)</p> <p>237 - Bayesian Signaling Game Based Efficient Security Model for MANETs (Presenter: Rashidah Funke Olanrewaju)</p> <p>140 - Development of Students' Security and Privacy Habits Scale (Presenter: Naurin Farooq Khan)</p> <p>165 - A Multi-dimensional Adversary Analysis of RSA and ECC in Blockchain Encryption (Presenter: Tianyi Ni)</p>