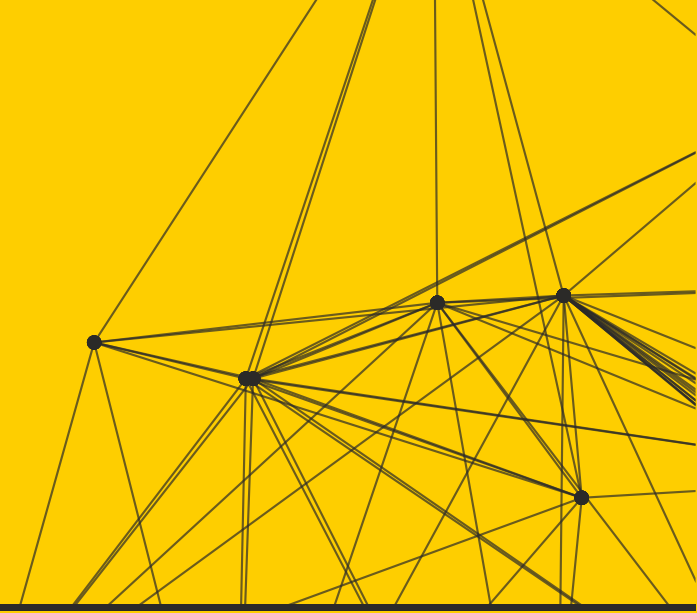


# FICC 2018

CONFERENCE AGENDA



## Future of Information and Communication Conference 2018

5-6 April 2018, Singapore

SPONSORS AND PARTNERS



# CONFERENCE AGENDA

## DAY 1 (5<sup>th</sup> April)

- 8:00 am – 8:30 am **Delegates Check-in**
- 8:30 am – 10:30 am **Conference Opening (Atrium Ballroom)**
- KEYNOTE TALKS**  
Mauro Sauco, Google  
Tsuguo Nobe, Intel Corp.
- 10:30 am – 11:00 am **POSTER PRESENTATIONS (Foyer)**
- 11:00 am - 12:45 pm **PAPER PRESENTATIONS**  
Session 1 - Machine Learning (Atrium)  
Session 2 - Data Science (Changi 2)  
Session 3 - Ambient Intelligence (Changi 3)
- 12:45 pm – 1:30 pm **Lunch**
- 1:30 pm – 3:00 pm **PAPER PRESENTATIONS**  
Session 4 - Communication (Atrium)  
Session 5 - Data Science (Changi 2)  
Session 6 - Internet of Things (Changi 3)
- 3:00 pm – 3:45 pm **KEYNOTE TALK**  
Wenbin Zhang, IBM Research (Atrium)
- 3:45 pm - 4:00 pm **Networking Break**
- 4:00 pm – 5:30 pm **PAPER PRESENTATIONS**  
Session 7 - Computing (Atrium)  
Session 8 - Data Science (Changi 2)  
Session 9 - Internet of Things (Changi 3)

## DAY 2 (6<sup>th</sup> April)

- 8:00 am **Delegates Arrive**
- 8:30 am – 10:30 am **KEYNOTE TALKS (Atrium Ballroom)**  
David W Stupples, City University London  
Maode Ma, NTU Singapore
- 10:30 am – 11:00 am **Networking Break (Foyer)**
- 11:00 am – 12:45 pm **PAPER PRESENTATIONS**  
Session 10 - Data Science (Atrium)  
Session 11 - Computing (Changi 2)  
Session 12 - Security and Privacy (Changi 3)
- 12:45 pm – 1:30 pm **Lunch**
- 1:30 pm – 3:00 pm **PAPER PRESENTATIONS**  
Session 13 - Communication (Atrium)  
Session 14 - Intelligent Systems (Changi 2)  
Session 15 - Security and Privacy (Changi 3)
- 3:00 pm – 3:30 pm **Networking Break**
- 3:30 pm – 5:00 pm **PAPER PRESENTATIONS**  
Session 16 - Communication (Atrium)  
Session 17 - Networking (Changi 2)  
Session 18 - Security and Privacy (Changi 3)
- 5:00 pm – 5:30 pm **Closing Ceremony (Atrium)**

# KEYNOTE SPEAKERS



**Mauro Sauco**

Google

5th April | 8:45 am - 9:30 am



**Tsuguo Nobe**

Intel Corp.

5th April | 9:30 am - 10:15 am



**Wenbin Zhang**

IBM Research

5th April | 3:00 pm - 3:30 pm



**David W Stupples**

City University London

6th April | 8:45 am - 9:30 am



**Maode Ma**

Nanyang Technological University

6th April | 9:30 am - 10:15 am

5<sup>th</sup> April 2018 (11:00 am - 12:45 pm)

PAPER PRESENTATIONS

<b>Session 1 - Machine Learning</b> Session Chair: Jiro Tanaka  (Room: Atrium)	<b>Session 2 - Data Science</b> Session Chair: Richard Seyler Ling  (Room: Changi 2)	<b>Session 3 - Ambient Intelligence</b> Session Chair: Chandrasekar Vuppalapati  (Room: Changi 3)
<p>21 - When Siri Knows How You Feel: Study of Machine Learning in Automatic Sentiment Recognition from Human Speech (Presenter: Liu Zhang, Singapore)</p> <p>240 - Hand Gesture Authentication using Depth Camera (Presenter: Jiro Tanaka, Japan)</p> <p>332 - FSL-BM: Fuzzy Supervised Learning with Binary Meta-Feature for Classification (Presenter: Kamran Kowsari, United States)</p> <p>114 - A Generic Multi-modal Dynamic Gesture Recognition System using Machine Learning (Presenter: Gautham Krishna G, Ankith . A Prabhu, India)</p> <p>142 - A Prediction Survival Model based on Support Vector Machine and Extreme Learning Machine for Colorectal Cancer (Presenter: Rajni Bala, India)</p>	<p>143 - The Meaning of Big Data in the Support of Managerial Decisions in Contemporary Organizations. Review of Selected Research (Presenter: Leszek Ziora, Poland)</p> <p>144 - Personalized Social Connectivity and Reputation (Presenter: Anton Kolonin, Russia)</p> <p>165 - Group Trip Recommendation Systems (Presenter: Sheng-Min Chiu, Taiwan)</p> <p>218 - Utilizing Social Media Analytics to Recommend Personalized Gifts using Content-based &amp; Multicriteria Collaborative Filtering (Presenter: Marisa Buctuanon, Philippines)</p> <p>247 - New Modification Version of Principal Component Analysis with Kinetic Correlation Matrix using Kinetic Energy (Presenter: Sara Alruzaqi, United Kingdom)</p> <p>252 - Prediction Model for Prevalence of Type-2 Diabetes Complications with ANN Approach Combining with K-Fold Cross Validation and K-Means Clustering (Presenter: Md Tahsir Ahmed Munna, Bangladesh)</p>	<p>130 - US2: An Unified Safety and Security Analysis Method for Autonomous Vehicles (Presenter: Giedre Sabaliauskaite, Singapore)</p> <p>320 - Laughbot: Detecting Humor in Spoken Language with Language and Audio Cues (Presenter: Annie Hu, Natalie Muenster, Kate Park, United States)</p> <p>101 - An Approach to Verify Heavy Vehicle Driver Fatigue Compliance Under Australian Chain of Responsibility Regulations (Presenter: Joel Scanlan, Australia)</p> <p>244 - Understanding the Adoption of Chatbot: A Case Study of Siri (Presenter: Hio Nam Io, Macau)</p> <p>250 - Emergency Departments: A Systematic Mapping Review (Presenter: Salman Alharethi, Saudi Arabia)</p>

**5<sup>th</sup> April 2018 (1:30 pm – 3:00 pm)**

**PAPER PRESENTATIONS**

**Session 4 - Communication**

Session Chair: Natasa Zivic

(Room: Atrium)

87 - Cognitive Channel Decoding (Presenter: Natasa Zivic, Germany)

97 - Scenario-based Functional Safety for Automated Driving on the Example of Valet Parking (Presenter: Valerij Schönemann, Germany)

283 - Energy Efficient Cognitive Radio Network using High Altitude Platform Station (Presenter: Umar Albalawi, Saudi Arabia)

281 - Partition based Product term Retiming for Reliable Low Power Logic Structure (Presenter: Jalaja S, India)

**Session 5 - Data Science**

Session Chair: Phoey Lee Teh

(Room: Changi 2)

319 - Improved Accuracy Stock Price Change Prediction Model using Trading Volume (Presenter: Zhen Wei, United Kingdom)

120 - Visual Video Analytics for Interactive Video Content Analysis (Presenter: Julius Schöning, Germany)

330 - Improving Subject-Independent EEG Preference Classification using Deep Learning Architectures with Dropouts (Presenter: Jason Teo, Malaysia)

352 - Data Mining and Knowledge Management Application to Enhance Business Operations: An Exploratory Study (Presenter: Zeba Mahmood, Pakistan)

171 - How Much is My Car Worth? A Methodology for Predicting used Cars Prices using Random Forest (Presenter: Puneet Kohli, United States)

**Session 6 - Internet of Things**

Session Chair: Chandrasekar Vuppalapati

(Room: Changi 3)

248 - Aiding Autobiographical Memory by using Wearable Devices (Presenter: Jiro Tanaka, Japan)

317 - Cerebral Blood Flow Monitoring using IoT Enabled Cloud Computing for Mhealth Applications (Presenter: Shahnam Mirzaei, United States)

139 - Precision Dairy Edge, Albeit Analytics Driven: A Framework to Incorporate Prognostics and Auto Correction Capabilities for Dairy IoT Sensors (Presenter: Chandrasekar Vuppalapati, United States)

288 - A Survey on SDN based Security in Internet of Things (Presenter: Renuga Kanagavelu, Singapore)

278 - Intelligent Communication between IoT Devices on Edges in Retail Sector (Presenter: M Saravanan, India)

**5<sup>th</sup> April 2018 (4:00 pm – 5:30 pm)**

**PAPER PRESENTATIONS**

**Session 7 - Computing**

Session Chair: Kohei Arai

(Room: Atrium)

336 - Benchmarking the Object Storage Services for Amazon and Azure (Presenter: Hassan Hajjdiab, United Arab Emirates)

59 - Enhancing the Usability of Android Application Permission Model (Presenter: Zeeshan Haider Malik, Habiba Farzand, Zahra Shafiq, Pakistan)

64 - MUT-APR: MUTation-based Automated Program Repair Research Tool (Presenter: Fatmah Assiri, Saudi Arabia)

82 - An Improvement of the Standard Hough Transform Method based on Geometric Shapes (Presenter: Sere Abdoulaye, Burkina Faso)

84 - The IBS as a Catalyst – Data Driven Insights (Presenter: Manchuna Shanmuganathan, Canada)

138 - A Novel Method For Stress Measuring Using EEG Signals (Presenter: Vinayak Bairagi India)

**Session 8 - Data Science**

Session Chair: Phoey Lee Teh

(Room: Changi 2)

268 - Predicting Video Game Players' Fun from Physiological and Behavioural Data (Presenter: Alexis Fortin-Côté, Sebastien Tremblay, Canada)

95 - Accuracy of Clustering Prediction of PAM and K-Modes Algorithms (Presenter: Vasil Hnatyshin, United States)

286 - Multiple Publications: The Main Reason for the Retraction of Papers in Computer Science (Presenter: Mymoona Al-Hidabi, Phoey Lee Teh, Malaysia)

49 - SQL and NoSQL Database Comparison (Presenter: Emily Ming Li Chang, Malaysia)

153 - Keypoints and Codewords Selection for Efficient Bag-of-Features Representation (Presenter: Veerapathirapillai Vinoharan, Sri Lanka)

**Session 9 - Internet of Things**

Session Chair: Richard Seyler Ling

(Room: Changi 3)

91 - SDWM: Software Defined Wi-Fi Mobility for Smart IoT Carriers (Presenter: Walaa Elsadek, Egypt)

94 - Smart Eco-Friendly Traffic Light for Mauritius (Presenter: Bilal Abdel Hassan, Mauritius)

131 - Logistics Exceptions Monitoring for Anti-Counterfeiting in RFID-Enabled Supply Chains (Presenter: Xiaoming Yao, China)

145 - Raspberry Pi based Smart Control of Home Appliance System (Presenter: El-Hadi Koumeri, Algeria)

148 - An IoT based Authentication and Fire Alarming System for Smart Building using Raspberry Pi (Presenter: El-Hadi Koumeri, Algeria)

65 - Smarthealth Simulation Representing a Hybrid Architecture Over Cloud Integrated with IoT (Presenter: Sarah Shafqat, Pakistan)

**6<sup>th</sup> April 2018 (11:00 am – 12:45 pm)**

**PAPER PRESENTATIONS**

<p><b>Session 10 - Data Science</b> Session Chair: Vasil Hnatyshin  (Room: Atrium)</p>	<p><b>Session 11 - Computing</b> Session Chair: Leszek Ziora  (Room: Changi 2)</p>	<p><b>Session 12 - Security and Privacy</b> Session Chair: Marc Weber  (Room: Changi 3)</p>
<p>291 - Propositions on Big Data Business Value (Presenter: Tommi Laukkanen, Emma Pirskanen, Finland)</p> <p>334 - Pattern Identification by Factor Analysis for Regions with Similar Economic Activity based on Mobile Communication Data (Presenter: Gundars Berzins, Latvia)</p> <p>135 - Elaborating Declaration of Medical Big Data (Presenter: Fadia Shah, Canada)</p> <p>125 - Forecasting Player Behavioral Data and Simulating in-Game Events (Presenter: Anna Guitart Atienza, Japan)</p> <p>274 - Discovering the Graph Structure in Clustering Results (Presenter: Evgeny Bauman, United States)</p> <p>257 - Enriching Existing Ontology using Semi-Automated Method (Presenter: Md Javed Hasan, Bangladesh)</p>	<p>162 - Blockchain-based Distributed Compliance in Multinational Corporations' Cross-Border Intercompany Transactions (Presenter: Wenbin Zhang, Singapore)</p> <p>156 - Effective Local Reconstruction Codes based on Regeneration for Large-Scale Storage Systems (Presenter: Quanqing Xu, Singapore)</p> <p>249 - Self- and Regulated Governance Simulation: Exploring Governance for Blockchain Technology (Presenter: Hock Chuan Lim, United Arab Emirates)</p> <p>167 - HIVE-EC: Erasure Code Functionality in HIVE through Archiving (Presenter: Aatish Chiniah, Mauritius)</p> <p>118 - GPU_MF_SGD: A Novel GPU-Based Stochastic Gradient Descent Method for Matrix Factorization (Presenter: Mohamed Ali, Kuwait)</p> <p>335 - Design Optimization of Activity Recognition System on an Embedded Platform (Presenter: Ateendra Ramesh and Adithya Ganesan V, India)</p>	<p>67 - Hybrid Data Mining to Reduce False Positive and False Negative Prediction in Intrusion Detection System (Presenter: Biswajit Panja, United States)</p> <p>126 - Optimizing Noise Level for Perturbing Geolocation Data (Presenter: Rajat Tandon, United States)</p> <p>315 - Anonymization of System Logs for Preserving Privacy and Reducing Storage (Presenter: Siavash Ghiasvand, Germany)</p> <p>324 - Detecting Target-Area Link-Flooding DDoS Attacks using Traffic Analysis and Supervised Learning (Presenter: Ngai-Man Cheung, Singapore)</p> <p>69 - Adblock Usage in Web Advertisement in Poland (Presenter: Artur Strzelecki, Poland)</p> <p>62 - Storage Optimization using Secure Image Hashing (Presenter: Sri Gurubaran B, India)</p>

**6<sup>th</sup> April 2018 (1:30 pm – 3:00 pm)**

**PAPER PRESENTATIONS**

<b>Session 13 - Communication</b> Session Chair: Ninoslav Marina  (Room: Atrium)	<b>Session 14 - Intelligent Systems</b> Session Chair: Leszek Ziora  (Room: Changi 2)	<b>Session 15 - Security and Privacy</b> Session Chair: Marc Weber  (Room: Changi 3)
<p>134 - Comparative Analysis of Digital Circuits using 16nm Finfet and HKMG PTM Models (Presenter: Satish Masthenahally, Oman)</p> <p>253 - 3 D Circular Embedded Antenna Mounted on Coaxial Feeding for Future Wideband Applications (Presenter: Dong You Choi, South Korea)</p> <p>280 - Ranking based System to Reduce Free Riding Behavior in P2P Systems (Presenter: Prem Nath, India)</p> <p>85 - A Novel Distributed Multi-Access Platform for Broadband Triple-Play Service Delivery (Presenter: Azrin Aris, Malaysia)</p> <p>164 - User-driven Intelligent Interface on the Basis of Multimodal Augmented Reality and Brain-Computer Interaction for People with Functional Disabilities (Presenter: Sergii Stirenko, Ukraine and Jiang Hui, China)</p>	<p>272 - Conditional Image Synthesis using Stacked Auxiliary Classifier Generative Adversarial Networks (Presenter: Zhongwei Yao, United Kingdom)</p> <p>255 - Modified Adaptive Neuro-Fuzzy Inference System Trained by Scoutless Artificial Bee Colony (Presenter: Norlida Hassan, Malaysia)</p> <p>355 - Intelligent Time Series Forecasting Through Neighbourhood Search Heuristics (Presenter: Murphy Choy, Singapore)</p> <p>228 - Haar Cascade Classifier and Lucas-Kanade Optical Flow based Realtime Object Tracker with Custom Masking Technique (Presenter: Karishma Mohiuddin, Bangladesh)</p> <p>223 - Recognition of Fingerprint Biometric System Access Control for Car Memory Settings through Artificial Neural Networks (Presenter: Abdul Rafay Pathan, Pakistan)</p>	<p>89 - Open Algorithms for Identity Federation (Presenter: Jose Balsa, United States)</p> <p>311 - Investigating the Effective use of Machine Learning Algorithms in Network Intruder Detection System (Presenter: Intisar Al-Mandhari, United Kingdom)</p> <p>333 - The Detection of Fraud Activities on the Stock Market Through Forward Analysis Methodology of Financial Discussion Boards (Presenter: Pei Shyuan Lee, Malaysia)</p> <p>217 - Security Enhancement of Internet of Things using Service Level Agreements and Lightweight Security (Presenter: Kuo-Qin Yan, Taiwan)</p> <p>285 - Walsh Sampling with Incomplete Noisy Signals (Presenter: Yi Janet Lu, Norway)</p>



**6<sup>th</sup> April 2018 (3:30 pm – 5:00 pm)**

**PAPER PRESENTATIONS**

<b>Session 16 - Communication</b> Session Chair: Ninoslav Marina  (Room: Atrium)	<b>Session 17 - Networking</b> Session Chair: Chandrasekar Vuppapapati  (Room: Changi 2)	<b>Session 18 - Security and Privacy</b> Session Chair: Marc Weber  (Room: Changi 3)
<p>115 - Fair Comparison of DSS Codes (Presenter: Ninoslav Marina, Macedonia)</p> <p>163 - Possibilities to Improve Online Mental Health Treatment: Recommendations for Future Research and Developments (Presenter: Dennis Becker, Germany)</p> <p>207 - End to End Deep Neural Network Frequency Demodulation of Speech Signals (Presenter: Dan Elbaz, Israel)</p> <p>260 - Robustness of Intelligent Vehicular Rerouting Towards Non-Ideal Communication Delay (Presenter: Christian Backfrieder, Austria)</p> <p>201 - Multi-Sensors 3D Fusion in the Presence of Sensor Biases (Presenter: Pham Cong Dan, Vietnam)</p>	<p>282 - Flow Characteristic-Aware Cache Replacement Policy for Packet Processing Cache (Presenter: Hayato Yamaki, Japan)</p> <p>98 - Evaluation of Parameters Affecting the Performance of Real Time Streaming on Real Time Communication Library in Named Data Networking (Presenter: F. Astha Ekadiyanto, Indonesia)</p> <p>20 - Threshold Sensitive Distributed Energy Efficient Clustering Protocol for Wireless Sensor Network (Presenter: Priya Papechen, India)</p> <p>276 - A Pro-active and Adaptive Mechanism for Fast Failure Recovery in SDN Data Centers (Presenter: Renuga Kanagavelu, Singapore)</p> <p>150 - Strong Degrees in Single Valued Neutrosophic Graphs (Presenter: Said Broumi, Morocco)</p>	<p>105 - A Hybrid Anomaly Detection System for Electronic Control Units Featuring Replicator Neural Networks (Presenter: Marc Weber, Germany)</p> <p>243 - Efficient Polynomial Multiplication via Modified Discrete Galois Transform and Negacyclic Convolution (Presenter: Ahmad Al Badawi, Singapore)</p> <p>259 - Privacy Preserving Computation in Home Loans using the FRESCO Framework (Presenter: Fook Mun Chan, Singapore)</p> <p>261 - Practically Realisable Anonymisation of Bitcoin Transactions with Improved Efficiency of the Zerocoin Protocol (Presenter: Jestine Paul, Singapore)</p> <p>326 - Intrusion detection system based on a deterministic finite automaton for smart grid systems (Presenter: Nadia Boumkheld, Morocco)</p>