BICT 2017 Technical Program at a Glance

**DAY 1 (March 15)**

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<th>Time</th>
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<td>8:30 – 9:00</td>
<td>Registration</td>
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<td>9:00 – 9:10</td>
<td>Opening</td>
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<tr>
<td>9:10 – 10:10</td>
<td>Keynote: Prof. Jane Hillston (University of Edinburgh, UK)</td>
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<tr>
<td>10:10 – 10:35</td>
<td>Coffee break</td>
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<tr>
<td>10:35 – 11:50</td>
<td>Session I: Best paper session</td>
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<tr>
<td>12:00 – 14:00</td>
<td>Lunch</td>
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<td>14:00 – 15:40</td>
<td>Session II</td>
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<td>LUC workshop</td>
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<td>15:40 – 16:20</td>
<td>Poster session &amp; Coffee break</td>
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<td>16:20 – 18:00</td>
<td>Session III</td>
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<td>18:00 – 20:00</td>
<td>Banquet</td>
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**DAY 2 (March 16)**

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<th>Time</th>
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<tr>
<td>8:30 – 9:00</td>
<td>Registration</td>
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<tr>
<td>9:00 – 10:30</td>
<td>Invited talk: Prof. Hargsoon Yoon (Norfolk State University, USA)</td>
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<td>Invited talk: Prof. Samantha Kleinberg (Stevens Institute of Technology, USA)</td>
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<td>Invited talk: Prof. Narayan Ganesan</td>
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<td>10:30 – 10:45</td>
<td>Coffee break</td>
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<td>10:45 – 12:00</td>
<td>Session IV</td>
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<td>Lunch</td>
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<td>14:00 – 14:30</td>
<td>Invited talk: Dr. Vishakha Sharma (Georgetown University, USA)</td>
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<td>14:30 – 15:20</td>
<td>Session V</td>
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<td>15:20 – 15:40</td>
<td>Coffee break</td>
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<tr>
<td>15:40 – 16:55</td>
<td>Session VI (BACS)</td>
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**Conference Rooms**

**Babbio Atrium**
- Registration, coffee break, lunch and banquet, poster/interactive session

**Babbio #122**
- All sessions (except for the poster/interactive session and workshop)

**Babbio #104**
- LUC workshop

**Paper Presentation Guidelines**

Presentation time
- 25 minutes, including QAs

Equipment available
• Projector  
• Connection to a projector  
• Microphone  
• (Please bring your own laptop. PCs will NOT be available at presentation rooms.)

Session chairs  
• Arrive early.  
• Ensure your session runs strictly on schedule.  
• Give a 5-minute-remaining warning to each paper presenter.

**Poster Presentation Guidelines**  
• Poster boards are available to present your poster  
• Poster size is up to A0 (84.1cm x 118.9cm)
DAY 1 (March 15)

8:30 – 9:00 Registration

9:00 – 9:10 Opening

9:10 – 10:10 Keynote

**Studying Smart Cities as Collective Adaptive Systems**
*Jane Hillston (University of Edinburgh, UK)*

Chair: **Adriana Compagnoni (Stevens Institute of Technology, USA)**

10:10 – 10:35 Coffee break

10:35 – 11:50 Session I: Best papers

Chair: **Tadashi Nakano (Osaka University, Japan)**

**Evolutionary pressures in emerging societies of secondary users in cognitive radio networks**
*Wisniewska, Anna (City University of New York, USA); Khan, Bilal (University of Nebraska-Lincoln, USA); Al-Fuqaha, Ala (Western Michigan University, USA); Dombrowski, Kirk (University of Nebraska-Lincoln, USA); Abu Shattal, Mohammad (Western Michigan University, USA)*

**A cellular model of swarm intelligence in bees and robots**
*Szopek, Martina (Karl-Franzens University Graz, Austria); Stefanec, Martin (Karl-Franzens University Graz, Austria); Bodi, Michael (Karl-Franzens University Graz, Austria); Radspieler, Gerald (Karl-Franzens University Graz, Austria); Schmickl, Thomas (Karl-Franzens University Graz, Austria)*

**Hyperdimensional Computing for Noninvasive Brain-Computer Interfaces: Blind and One-Shot Classification of EEG Error-Related Potentials**
*Rahimi, Abbas (UC Berkeley, USA); Kanerva, Pentti (UC Berkeley, USA); Millán, José del R. (EPFL, Switzerland); Rabaey, Jan M. (UC Berkeley, USA)*

12:00 – 14:00 Lunch

14:00 – 15:40 Session II

Chair: **Aftab Ahmad (The City University of New York, USA)**

**Fuzzy Logic Training for Predicting Age of Rats**
*Dow, Douglas Eric (Wentworth Institute of Technology, USA); Hayashi, Isao (Kansai University, Japan)*

**Efficient Feature Vector Clustering for Automatic Speech Recognition Systems**
Lazli, Lilia (Université du Québec à Montreal, Montreal, Canada); Boukadum, Mounir (École de technologie supérieure, Canada); Mohamed, Otmame Ait (Concordia University, Canada)

Affinity Based Search Amount Control in Decomposition Based Evolutionary Multi-Objective Optimization
Sato, Hiroyuki (The University of Electro-Communications, Japan); Miyakawa, Minami (Hosei University, Japan); Takadama, Keiki (The University of Electro-Communications, Japan)

Polynomial Mean-Centric Crossover for Directed Mating in Evolutionary Constrained Multi-Objective Continuous Optimization
Miyakawa, Minami (JSPS Research Fellow, Hosei University, Japan); Sato, Hiroyuki (The University of Electro-Communications, Japan); Sato, Yuji (Hosei University, Japan)

14:00 – 15:40 Workshop on Logics for Unconventional Computing (LUC)

Chair: Andrew Schumann (University of Information Technology and Management in Rzeszow, Poland)

On Arithmetic Functions in Actin Filament Networks
Andrew Schumann (University of Information Technology and Management in Rzeszow, Poland)

Quantitative Assessment of Ambiguities in Plasmodium Propagation in Terms of Complex Networks and Rough Sets
Krzysztof Pancerz (Faculty of Mathematics and Natural Sciences, Poland)

Talmudic Foundations of Mathematics
Andrew Schumann (University of Information Technology and Management in Rzeszow, Poland); Alexander V. Kuznetsov (Voronezh State University, Russia)

Automatic role-oriented assignment of channels in the ad hoc network of hierarchically organized agents
Alexander V. Kuznetsov (Voronezh State University, Russia)

15:40 – 16:20 Poster/Interactive Session and Coffee break

Fuzzy Logic Training for Predicting Age of Rats
Dow, Douglas Eric (Wentworth Institute of Technology, USA); Hayashi, Isao (Kansai University, Japan)

Anticipating Diabetic Kidney Disease Through Measurements of Albumin in Diabetes Patients
Nieto-Chaupis, Huber (Universidad de Ciencias y Humanidades, Peru)

Bio-inspired Active Attack for Identification of Networked Control Systems
Sa, AlanOliveira de (Brazilian Navy, Brazil); Carmo, LuizFernando Rust da Costa (Inmetro, Brazil); Machado, RaphaelCarlos Santos (Inmetro, Brazil)

Epidemic Information Dissemination in Mobile Molecular Communication Networks for Target Detection Applications
Okaie, Yutaka (Osaka University, Japan); Nakano, Tadashi (Osaka University, Japan); Hara, Takahiro (Osaka University, Japan)

Anonymity and Aggressive Behavior in an Online Forum
Can the hypothesis of brain signal modularity be tested?
Ahmad, Aftab (The City University of New York, USA)

16:20 – 18:00 Session III

Chair: Tadashi Nakano (Osaka University, Japan)

Relating Feed-Forward Loop Crosstalk to Robust Information Transport Across Transcriptional Networks
Syed, Khajamoinuddin (Virginia Commonwealth University, USA); Abdelzaher, Ahmed (Virginia Commonwealth University, USA); Mayo, Michael (US Army Engineer Research and Development Center, USA); Perkins, Edward (US Army Engineer Research and Development Center, USA); Ghosh, Preetam (Virginia Commonwealth University, USA)

Epidemic Information Dissemination in Mobile Molecular Communication Networks for Target Detection Applications
Okaie, Yutaka (Osaka University, Japan); Nakano, Tadashi (Osaka University, Japan); Hara, Takahiro (Osaka University, Japan)

A Framework of Nanomechanical Communication Systems Based on State Transitions
Nasif, Ahmed (University of Wisconsin-Madison, USA); Mahfuz, MohammadUpal (University of Wisconsin-Green Bay, USA); Thota, Jagadeep (University of Wisconsin-Green Bay, USA)

Impacts of Erasure Coding on Robustness against Molecular Packet Losses in Aqueous, Collisional Environments
Egashira, Hiroaki (Shibaura Institute of Technology, Japan); Suzuki, Junichi (University of Massachusetts, Boston, USA); Mitzman, Jonathan S. (University of Massachusetts, Boston, USA), Nakano, Tadashi (Osaka University, Japan); Fukuda, Hiroaki (Shibaura Institute of Technology, Japan)

18:00 – 20:00 Banquet

DAY 2 (March 16)

8:30 – 9:00 Registration

9:00 – 10:30 Invited talks

Chair: Adriana Compagnoni (Stevens Institute of Technology, USA)

Sensing and Functional Imaging of Dynamic and Networked Neural Activity in the Brain
Hagsoon Yoon (Norfolk State University, USA)

Understanding Human Health and Disease from Data at Multiple Scales
Samantha Kleinberg (Stevens Institute of Technology, USA)

TBA
Narayan Ganesan (VP at Morgan Stanley; Washington University in St. Louis)
10:30 – 10:45 Coffee break

10:45 – 12:00 Session IV

Chair: Bilal Khan (University of Nebraska-Lincoln, USA)

Robotic oligarchy: How a few members can control their whole society by doing almost nothing
Stefanec, Martin (Karl-Franzens University Graz, Austria); Szopek, Martina (Karl-Franzens University Graz, Austria); Thenius, Ronald (Karl-Franzens University Graz, Austria); Radspieler, Gerald (Karl-Franzens University Graz, Austria); Schmickl, Thomas (Karl-Franzens University Graz, Austria)

Performance Optimization of Self-organizing Bioparticles for Multi-target Detection and Gravitation Problems
Yang, Jian (Osaka University, Japan); Iwasaki, Satoru (Osaka University, Japan); Abraham, Anthony (Osaka University, Japan); Hagad, JuanLorenzo (Osaka University, Japan); Obuchi, Takuya (Osaka University, Japan); Nakano, Tadashi (Osaka University, Japan)

Simulating Self-replicating Patterns of DNA Tiles
Gautam, Vinay K (Norwegian University of Science and Technology, Norway); Prasath, Rajendra (Norwegian University of Science and Technology, Norway)

12:00 – 14:00 Lunch

14:00 – 14:30 Invited talk

Chair: Adriana Compagnoni (Stevens Institute of Technology, USA)

An Eye-tracking Study to Enhance Usability of Big Data in Cancer Precision Medicine
Vishakha Sharma (Georgetown University, USA)

14:30 – 15:20 Session V

Chair: Adriana Compagnoni (Stevens Institute of Technology, USA)

Anticipating Diabetic Kidney Disease Through Measurements of Albumin in Diabetes Patients
Nieto-Chaupis, Huber (Universidad de Ciencias y Humanidades, Peru)

A Survey of Location Aware Ant Colony Optimization Routing Protocols in MANETs
Zhang, Hang (University of Goettingen, Germany); Wang, Xi (University of Goettingen, Germany); Hogrefe, Dieter (University of Goettingen, Germany)

15:20 – 15:40 Coffee break

15:40 – 16:55 Session VI (BACS)

Chair: William Casey (Carnegie Mellon University, USA)
Model abstractions of Device-Delay for Interactive Cyber Physical Systems under Uncertainty
Ghosh, Krishnendu (Miami University, USA)

Bio-inspired Active Attack for Identification of Networked Control Systems
Sa, AlanOliveira de (Brazilian Navy, Brazil); Carmo, LuizFernando Rust da Costa (Inmetro, Brazil); Machado, RaphaelCarlos Santos (Inmetro, Brazil)

This Malware Looks Familiar: Laymen Identify Malware Run-time Similarity with Chernoff faces and Stick Figures
Kanal, Eliezer (Carnegie Mellon University, USA); VanHoudnos, Nathan (Carnegie Mellon University, USA); Casey, Will (Carnegie Mellon University, USA); French, David (Carnegie Mellon University, USA); Lindauer, Brian (Carnegie Mellon University, USA); Moon, Seungwhan (Carnegie Mellon University, USA); Jansen, Peter (Carnegie Mellon University, USA); Carbonell, Jamie (Carnegie Mellon University, USA); Wright, Evan (Anomali Inc., USA)