**SMC 2016 Hotel Intercontinental** October 8 Saturday **Duna Salon II Duna Salon IV Ballroom III** Panorama I Panorama II Panorama III Panorama IV Panorama V **Duna Salon III** Ballroom I Ballroom II 09.00-18.00 **Brain Hackathon** October 9 Sunday **Duna Salon II Duna Salon III Duna Salon IV** Panorama III Ballroom I **Ballroom II Ballroom III** Panorama I Panorama II Panorama IV Panorama V 08.30-09.00 **Tutorial III** Big Data based Technological **Tutorial I** Cognitive Phase Transitions in the Workshop Women in **Innovations on Intelligent Tutorial IV** 9.00-10.30 **IEEE Standards** Cerebral Cortex: Brain Imaging Automatic Affective and Task Engineering (I) **Health Service in the Clouds** Human-Machine Interaction Experiments, Graph Theory Models, Analysis for Wearable Computing and Engineering Applications Coffee break\* 10.30-11.00 **Tutorial III** Big Data based Technological Tutorial I Cognitive Phase Transitions in the Workshop Women in **Innovations on Intelligent Tutorial IV** 11.00-12.30 Cerebral Cortex: Brain Imaging **IEEE Standards** Automatic Affective and Task **Health Service in the Clouds Engineering (II)** Human-Machine Interaction **Brain Hackathon** Experiments, Graph Theory Models, Analysis for Wearable Computing (II)and Engineering Applications **BoG Meeting** Lunch\*\* 12.30-13.30 Lunch\* **Tutorial II** Tutorial V **BMI Tutorial I** New Ways to Look at Similarity and **IEEE Standards** Mobile BCI application: onest Evaluations of Shared Huma 13.30-15.00 Association Measures and the (breakout room) Neuroscience-based design and Machine Control Systems Methods of their Construction neurorehabilitation **IEEE Standards** Coffee break\* 15.00-15.30 15.30-16.00 **Tutorial II BMI Tutorial II** Tutorial V New Ways to Look at Similarity and Why bother with advanced modeling Honest Evaluations of Shared Human **IEEE Standards** Association Measures and the 16.00-17.00 in BCI? Lessons from neuroimaging. Machine Control Systems (breakout room) Methods of their Construction 17.00-18.00 **Welcome reception** 18.30-21.00 \* Closed coffee break for invited attendees \*\* Lunch is self-covered October 10 Monday **Duna Salon II** Panorama I Panorama II Panorama III Panorama IV **Duna Salon III Duna Salon IV** Ballroom I **Ballroom II Ballroom III** Panorama V **Opening Ceremony** 08.00-08.30 Panel dedicated to John von Neumann "a Pioneer of Modern Computer Science" 08.30-10.30 Coffee break 10.30-11.00 Keynote Talk I 11.00-12.00 Jose Carmena: Advances in Brain-Machine Interface Systems Lunch 12.00-13.30 IEEE President's talk: BMI Opening, Disruptive Innovations as a Vehicle to Develop Critical Thinking, Creativity and Innovation Skills, IEEE President 13.30-14.15 SMC Junior Keynote (I) Barry Shoop Pattern Recognition and Image Modern Technology on Medicine, Big Data Analytics Medical Mechatronics (I) Intelligent Internet Systems (I) Processing (I) Health Care and Human Assist (I) BMI Panel-Important Topics in Designing and Building Real World BMI 14.15-15.00 SMC Junior Keynote (II) Systems Coffee break 15.00-15.30 BMI Invited Speaker - Jose del R. Millan 15.30-16.15 Neuroprosthetics: The Role of the Brain's Error Monitoring System Modern Technology on Medicine, Human Centered Transportation Interactive and Wearable Computing Pattern Recognition and Image Intelligent Internet Systems (II) Medical Mechatronics (II) Health Care and Human Assist (II) and Devices Processing (II) Systems (I) Founders Session (I) 16.15-17.00 From Research to Scientific Breakthroughs to Improving the Lives of People: Six Unique Paths Founders session (II) Modern Technology on Medicine, Human-Machine Cooperation and Collaborative Wireless Sensor 17.00-18.30 From Research to Scientific Breakthroughs to Improving the Lives of **Enterprise Information Systems Intelligent Transportation Systems** Health Care and Human Assist (III) **Intelligent Internet Systems** Networks and Internet of Things People: Six Unique Paths 18.30-21.00 **BMI Reception** October 11 Tuesday **Duna Salon II Duna Salon III Duna Salon IV Ballroom III** Panorama I Panorama IV Ballroom I Ballroom II Panorama II Panorama III Panorama V Keynote Talk II 08.00-09.00 Nikola Kasabov: Spiking Neural Networks ... Coffee break 09.00-09.30 BMI Papers - Adaptive and Self-BMI Papers - Performance Metrics Intelligent Learning in Control BMI Papers - Health and Non-Calibrating BMI Systems for 09.30-11.00 and Human Factors for BMI Training Proactive Healthcare Systems (I) Best Paper Award Systems (I) Invasive Wearable BMI Independent Use and Operation BMI Invited speaker-Paul Sajda Neural Correlates of the "Aha" Moment: Enabling Brain-Computer 11.00-11.45 Interfaces for Labeling Our Environment Pattern Recognition and Image Intelligent Computing and Innovative Intelligent Learning in Control Junior Systems Science & Proactive Healthcare Systems (II) Intelligent Internet of Things Best Paper Student Award Processing (III) Applications (I) Systems (II) Engineering (I) BMI Panel-How Research and Methodologies in Systems, Human-11.45-12.30 Machine Systems, and Cybernetics can be Applied to BMI Lunch 12.30-14.00 Matrix Analysis and Feature Innovative Computational Collaborative Technologies and Pattern Recognition and Image Intelligent Computing and Innovative Junior Systems Science & 14.00-15.30 IEEE Brain Initiative Meeting Intelligence, Learning Representation Learning for Multimedia Decision Support Systems (I) Processing (IV) Applications (II) Applications (III) Engineering (II) of Data, and Industrial Applications Understanding (II) **Horse Show** 17.00-18.00 **Award Ceremony** 18.00-19.00 **Conference Dinner** 19.00-21.00 October 12 Wednesday **Duna Salon II Duna Salon III Duna Salon IV Ballroom III** Panorama III Ballroom I **Ballroom II** Panorama I Panorama II Panorama IV Panorama V Keynote Talk III 08.00-09.00 Huijun Gao: Networked Control Systems with... Coffee break 09.00-09.30 BMI Papers - Real World BMI papers - Neuroscience Based BMI Papers - BMI for Robotics, Human Machine Interface, Infrastructure Systems and Services BMI Papers - BMI for Neurodriving 09.30-11.00 Motor/Cognitive Rehabilitation and **Applications of Brain Computer** Design: Fundamentals and and Haptics (III) Interface Systems (I) Assistance (I) Applications BMI Papers - Brain and Human-**Machine Interaction** BMI Papers - Real World BMI Papers - Multi-modal Brain BMI Papers - BMI for Junior-Cybernetics in Applied Robotics, Human Machine Interface, Junior Systems Science & 11.00-12.30 Tensor Product Applications Computer Interface and Physiological **Applications of Brain Computer** Motor/Cognitive Rehabilitation and and Haptics (IV) Sciences (I) Engineering (III) Interface Systems (II) Assistance (II) Computing Tribute to Walter J. Freeman Lunch 12.30-14.00 BMI Papers - Real World BMI Invited speakers (Sensors BMI Papers - Recent Advances in Grey System Theory and Application Complexity and Complex Systems in Junior Human-Machine Systems (I) Council)-"Sensor Technologies for Model-based Healthcare (I) 14.00-15.30 Applications of Brain Computer Machine Learning with Big Data Computational Cybernetics (I) BMI Speller Multimodal Brain Interfacing" Interface Systems (III) Coffee break 15.30-16.00 BMI Invited speaker-Andrew F. Laine 16.00-16.45 Quantitative Imaging Informatics in Cost Effective PET Imaging Complexity and Complex Systems in Junior Human-Machine Systems (II) Networked Systems and Networked Grey System Theory and Application Model-based Healthcare (II) Junior Cybernetics Conflict Resolution (I) Computational Cybernetics (II) Control (I) BMI Closing Panel I-What Have We 16.45-17.30 Learned, Where Do we Go from Here BMI Closing Panel II-What Have We 17.30-18.15 Learned, Where Do we Go from Here Advanced Methods and Applications Pattern Recognition and Image Networked Systems and Networked Grey System Theory and Application | Decision Support Systems based on | Recent advances in intelligent image

for Increasing Control Systems

Reliability, Safety and Security

Multicriteria Methods

and video analysis

Human Performance Modeling

Strategic Roadmap Discussion for

BMI: Audience Participation

Conflict Resolution (II)

Decision Support Systems (II)

Processing (V)

Control (II)

18.15-19.00

# **SMC 2016 Hotel Sofitel**

# October 10 Monday

	Bellevue 1	Bellevue 2	Bellevue 3	Academy 3	Academy 4	
12.00-13.30		Lunch				
13.30-15.00	Knowledge-based and Intelligent Control Solutions for Medical Cyber- Physical Systems (I)	Granular Computing (I)	Cybermatics for Cyber-enabled Worlds (I)	Intelligent Vehicle Systems and Control (I)	Robotic Systems (I)	
15.00-15.30	Coffee break					
15.30-17.00	Knowledge-based and Intelligent Control Solutions for Medical Cyber- Physical Systems (II)	Granular Computing (II)	System Modeling and Control (I)	Intelligent Vehicle Systems and Control (II)	Robotic Systems (II)	
17.00-18.30	Computational Collective Intelligence	Model-Based Systems Engineering	System Modeling and Control (II)	Intelligent Vehicle Systems and Control (III)	Matrix Analysis and Feature Learning for Multimedia Understanding (I)	

### October 11 Tuesday

	Bellevue 1	Bellevue 2	Bellevue 3	Academy 3	Academy 4	
09.00-09.30		Coffee break				
09.30-11.00	Computational Awareness (I)	Discrete Event and Hybrid Systems	Intelligent Power and Energy Systems (I)	Shared Control (I)	Collaborative Technologies and Applications (I)	
11.00-12.30	Computational Awareness (II)	Machine Vision and Evolutionary Computation	Intelligent Power and Energy Systems (II)	Shared Control (II)	Collaborative Technologies and Applications (II)	
12.30-14.00	Lunch					
14.00-15.30	Computational Awareness (III)	Optimization	Cybermatics for Cyber-enabled Worlds (II)	Human Factors	Human-Machine Cooperation and Systems	
17.00-18.00	Horse Show					
18.00-19.00	Award Ceremony					
19.00-21.00	Conference dinner					

## October 12 Wednesday

	Bellevue 1	Bellevue 2	Bellevue 3	Academy 3	Academy 4
09.00-09.30	Coffee break				
09.30-11.00	Human-Computer Interaction	BMI Papers - Machine Learning Methods for Brain-Computer Interfacing (I)	BMI Papers - Neurostimulation and BMI	Evolutionary Computation	In memory of William A. Gruver - Special Session on Distributed Adaptive Systems
11.00-12.30	Soft Computing (I)	BMI Papers - Machine Learning Methods for Brain-Computer Interfacing (II)	BMI Papers - Sensor Systems for BMI and Prosthetics	Medical Imaging Analytics and Systems Solutions (I)	Better Artificial Intelligence Methods for Bigger Data Mining (I)
12.30-14.00	Lunch				
14.00-15.30	Soft Computing (II)	Distributed Adaptive Systems and Biometric systems	Better Artificial Intelligence Methods for Bigger Data Mining (II)	Junior-Cybernetics in Applied Sciences (II)	Behavior Modeling for Intelligent Human-Agent Interactions (I)
15.30-16.00	Coffee break				
16.00-17.30	Soft Computing (III)	Machine Learning	Robotics, Human Machine Interface, and Haptics (I)	Medical Imaging Analytics and Systems Solutions (II)	Behavior Modeling for Intelligent Human-Agent Interactions (II)
17.30-19.00	Logistics Informatics and Knowledge Acquisition in Intelligent	Intelligent Media and New- Generation Software	Robotics, Human Machine Interface, and Haptics (II)	Human Centered Transportation Systems (II)	Neural Networks and Applications

### **SMC 2016 Hotel Intercontinental**

### October 10 Monday

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	Poster Spot 1	Poster Spot 2		
12.00-13.30	Lunch			
13.30-15.00	Poster Session I1	Poster Session I2		
15.00-15.30	Coffee break			
15.30-17.00	Poster Session I3	Poster Session I4		
17.00-18.30	Demo Session			
18.30-21.00	BMI Reception			

# October 11 Tuesday Poster Snot 1 Poster Snot 2

	Poster Spot 1	Poster Spot 2	
09.00-09.30	Coffee break		
09.30-11.00	Poster Session I5	Poster Session I6	
11.00-12.30	Poster Session I7		
12.30-14.00	Lunch		
14.00-15.30			
17.00-18.00	Horse Show		
18.00-19.00	Award Ceremony		
19.00-21.00	Conference Banquett		
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### October 12 Wednesday

	Poster Spot 1	Poster Spot 2	
09.00-09.30	Coffee break		
09.30-11.00	Poster Session I8	Poster Session I9	
11.00-12.30	Poster Session I10	Poster Session I11	
12.30-14.00	Lunch		
14.00-15.30	Poster Session I12	Poster Session I13	
15.30-16.00	Coffee break		
16.00-17.30			

### **SMC 2016 Hotel Sofitel**

### October 10 Monday

	Poster Spot 1	Poster Spot 2	
12.00-13.30	Lunch		
13.30-15.00	Poster Session S1	Poster Session S2	
15.00-15.30	Coffee break		
15.30-17.00	Poster Session S3	Poster Session S4	
17.00-18.30			

### October 11 Tuesday

	Poster Spot 1	Poster Spot 2	
09.00-09.30	Coffee break		
09.30-11.00	Poster Session S5	Poster Session S6	
11.00-12.30	Poster Session S7		
12.30-14.00	Lunch		
14.00-15.30			
17.00-18.00	Horse Show		
18.00-19.00	Award Ceremony		
19.00-21.00	Conference dinner		

### October 12 Wednesday

	Poster Spot 1	Poster Spot 2	
09.00-09.30	Coffee break		
09.30-11.00	Poster Session S8	Poster Session S9	
11.00-12.30	Poster Session S10	Poster Session S11	
12.30-14.00	Lunch		
14.00-15.30			
15.30-16.00	Coffee	break	
16.00-17.30			
17.30-19.00			