

All accepted papers need to be registered and presented in SMC 2017, otherwise will be removed from the program schedule and excluded in the proceedings.

IEEE SMC 2017 HMS-BMI oral sessions (subject to minor refinement as necessary)

Date	Session		Session Chair
05-Oct	5KC205f 13:20-15:00	Machine Learning and Signal Processing for Brain and Neural Computer Interfaces I	Dongrui Wu
20min	927	Brain Dynamic States Analysis Based on 3D Convolutional Neural Network	
		Yu Chia Hung, Chun-Hsiung Chuang, Yu-Kai Wang*, Mukesh Prasad, Chin-Teng Lin (Australia)	
20min	684	Single trial P300 identification for an auditory BCI: implementation of a 3D input for convolutional neural networks	
		Eduardo Carabez*, Miho Sugi, Isao Nambu, Yasuhiro Wada (Japan)	
20min	1007	Deep Learning-Based Classification for Brain-Computer Interfaces	
		John Thomas*, Tomasz Maszczyk, Sinha Nishant, Kluge Tilmann, Justin Dauwels	
20min	691	Driver's Fatigue Prediction by Deep Covariance Learning from EEG	
		Mehdi Hajinorozi, Zhang Michelle, Yufei Huang* (USA)	
05-Oct	5KC205f 15:15-17:00	Machine Learning and Signal Processing for Brain and Neural Computer Interfaces II	Chavarriaga Lozano Ricardo
20min	557	Active Semi-Supervised Transfer Learning (ASTL) for Offline BCI Calibration	
		Dongrui Wu* (USA)	
20min	1194	Informative instance transfer learning with subject specific frequency responses for motor imagery Brain Computer Interface.	
		Ibrahim Hossain*, Saeid Nahavandi (Australia)	

20min	645	Inverse Solutions for Brain-Computer Interfaces: Effects of Regularisation on Localisation and Classification	
		Mohit Kumar Goel, Ricardo Chavarriaga*, José Millán (Switzerland)	
20min	360	Binary Classification of Hand Movement Directions from EEG Using Wavelet Phase-Locking	
		Tushar Chouhan*, Robinson Neethu, Vinod Achutavarrier Prasad, Kai Keng Ang (Singapore)	
20min	347	Frequency Filter Networks for EEG-Based Recognition	
		Miku Yanagimoto*, Chika Sugimoto, Tomoharu Nagao (Japan)	
06-Oct	6MB252m 8:00- 9:30	BMI Opening, Invited Speaker/Panel	Michael Smith
06-Oct	6MB252f 13:20- 17:00	IEEE Standards Meeting	Chavarriaga Lozano Ricardo
07-Oct	7KC101-3f 15:15-17:00	Neuro-Interfacing Wearable Robots: Current State and Future Steps	Joel Libove
20min	720	Adaptive Multimodal Biosignal Control for Exoskeleton Supported Stroke Rehabilitation	
		Anett Seeland*, Marc Tabie, Su-Kyoung Kim, Frank Kirchner, Elsa Andrea Kirchner (Germany)	
20min	1047	Cortical Features of Locomotion-Mode Transitions via Non-invasive EEG	
		Trieu Phat Luu*, Justin Brantley, Fangshi Zhu, Jose Contreras-Vidal (USA)	
		Wearable BMI Technology for Thought Identification and other High Information Content Applications	Neethu Robinson
20min	409	The Physiological Influence of Alternating Current Electromagnetic Field Exposure on Human Subjects	
		Hideyuki Okano*, Hiromi Ishiwatari, Akikatsu Fujimura, Keiichi Watanuki (Japan)	

20min	796	Picosecond Pulse Imaging – Uniquely Promising but Challenging Modality for a Wearable BMI	
		Joel Libove*, David Schriebman, Mike Ingle (USA)	
20min	1116	A Two-Target Paradigm for an Auditory Brain-Computer Interface: A Preliminary Study	
		Miho Sugi, Isao Nambu*, Yasuhiro Wada (Japan)	
07-Oct	7MB251m 8:00- 10:00	Machine Learning and Signal Processing for Brain and Neural Computer Interfaces III	Dongrui Wu
20min	958	Self-Paced Training on Motor Imagery-Based BCI for Minimal Calibration	
		Time Seon-Min Kim, Min-Ho Lee, Seong-Whan Lee* (Korea, South)	
20min	1050	EEG-Based Motor Imagery Classification Using Subject-Specific Spatio-Spectral Features	
		Kavitha Thomas*, Robinson Neethu, Vinod Achutavarrier Prasad (Singapore)	
20min	964	Comparison of Alpha/Beta and High-Gamma Band for Motor-Imagery Based BCI Control	
		Johannes Gruenwald, Christoph Kapeller, Christoph Guger, Hiroshi Ogawa, Kyoussuke Kamada, Josef Scharinger	
20min	949	Investigation of the Phase Feature of Low-Frequency Electroencephalography Signals for Decoding Hand Movement Parameters	
		Yuanzi Sun, Hong Zeng*, Aiguo Song, Baoguo Xu, Huijun Li, Jia Liu, Pengcheng Wen (China)	
20min	1051	Canonical Correlation Analysis of EEG for Classification of Motor Imagery	
		Robinson Neethu*, Kavitha Thomas, Vinod Achutavarrier Prasad (Singapore)	
20min	900	Effects of Transcranial Direct Current Stimulation on the Motor-Imagery Brain-Computer Interface for Stroke Recovery: An EEG Source-Space Study	
		Vikram Shenoy Handiru*, Vinod Achutavarrier Prasad, Kai Keng Ang, Effie Chew, Cuntai Guan (Singapore)	

07-Oct	7MB251f 13:20- 15:00	Brain-Computer Interfaces for Users with Motor and Cognitive Disabilities	Kavitha Thomas
20min	1011	Mindbeagle – a New System for the Assessment and Communication with Patients with Disorders of Consciousness and Complete Locked-In Syndrom	
		Christoph Guger, Brendan Allison, Andrea Kammerhofer, Florian Guttman, Tim Von Oertzen, Rossella Spataro, Vincenzo La Bella, Jitka Annen, Steven Laureys, Alexander Heilinger*, Rupert Ortner, Woosang Cho (Austria)	
20min	747	Characterization of Cortical Motor Function and Imagery-Related Cortical Activity: Potential Application for Prehabilitation	
		Milena Korostenskaja, Christoph Kapeller, Ki Hyeong Lee, Christoph Guger, James Baumgartner, Eduardo Martinez Castillo	
20min	735	Prediction of Individual Finger Movements for Motor Execution and Imagery : An EEG Study	
		Tetsuro Hayashi*, Hiroshi Yokoyama, Isao Nambu, Yasuhiro Wada (Japan)	
20min	504	Personalized Brain-Computer Interface Models for Motor Rehabilitation	
		Anastasia-Atalanti Mastakouri*, Sebastian Weichwald, Ozan Özdenizci, Timm Meyer, Bernhard Schölkopf, Moritz Grosse-Wentrup (Germany)	
07-Oct	7MB251f 15:15-17:00	Real World Applications of Brain Computer Interface Systems	Smitha Kavallur
20min	1120	Mobile EEG-Based Situation Awareness Recognition for Air Traffic Controllers	
		Lee Guan Yeo, Haoqi Sun, Yisi Liu*, Fitri Trapsilawati, Olga Sourina, Chun-Hsien Chen, Karl Wolfgang Mueller-wittig, Wei Tech Ang (Singapore)	
20min	400	Classifying Subjective Emotional Stress Response Evoked by Multitasking Using EEG	
		Smitha Kavallur, Yu Xin Ng, Sze Lian Seah, Robinson Neethu	
20min	1209	EEG-Based Auditory Attention Decoding: Impact of Reverberation, Noise and Interference Reduction	
		Ali Aroudi*, Simon Doclo (Germany)	
20min	185	EEG-Based Biometric Authentication Using Self-Referential Visual Stimuli	

		Ericson Ericson, Kavitha Thomas*, Vinod Achutavarrier Prasad (Singapore)	
20min	434	EEG-Based Brain-Computer Interface to a Virtual Walking Avatar Engages Cortical Adaptation	
		Trieu Phat Luu*, Yongtian He, Sho Nakagome, Jose Contreras-Vidal (USA)	
08-Oct	KC101-3-5m 8:00-10:20	Neuro-Interfacing Wearable Robots: Current State and Future Steps	José Contreras-Vidal
20min	1226	EMG Signal Controlled Transhumeral Prosthetic with EEG-SSVEP Based Approach for Hand Open/Close	
		Ruhunage Isuru*, Chamika Janith Perera, Kalinga Nisal, Madhuranga Janaka Subodha, Thilina Dulantha Lalitharatne (Sri Lanka)	
20min	435	Prediction of EMG Envelopes of Multiple Terrains Over-Ground Walking from EEG Signals Using an Unscented Kalman Filter	
		Sho Nakagome*, Trieu Phat Luu, Justin Brantley, Jose Contreras-Vidal (USA)	
20min	863	Electroencephalography-Guided Upper-Limb Hybrid Robotic Platform to Modulate Cortical Excitability	
		Francisco Resquín Resquín*, Oscar Herrero, Jaime Ibañez Pereda, Jose Gonzalez-Vargas, Fernando Brunetti, José Luis Pons (Spain)	
20min	1174	Model Predictive Control for a Brain-Controlled Mobile Robot	
		Fujian He, Luzheng Bi*, Hongqi Li, Yun Lu, Ling Wang (China)	
20min	652	Building Cognitive Knowledge Bases Sharable by Humans and Cognitive Robots	
		Yingxu Wang* (Canada)	