2018 Conference on Cyberworlds, 3-5 October 2018

Advance Program

Legend:
F*n* - full paper with paper ID=*n*, S*n* - short paper with paper ID=*n*, P*n* - poster paper with paper ID=*n*
GT*n* - General Track paper session number *n*;
CHMI*n* - Cognitive Human-Machine Interaction Track paper session number *n*;
CSBM*n* - Cybersecurity and Biometrics Track paper session number *n*;
CCCM*n* - Cyber Cities and Cyber Manufacturing Track paper session number *n*.
Color coding: plenary meeting; parallel paper session; food break; cultural event; lecture room not used.

3-Oct		
TIME	**Lecture Room LR 1**	**Lecture Room LR 2**
09:00-09:15	Opening greetings by the conference chairs	
09:15-10:15	**Keynote 1**: Kiyoshi Kiyokawa	
10:15-10:30	Coffee Break	
10:30-11:30	**Posters** fast forward (15'), presentations and demos (45') P109, P110, P111, P112, P115, P116, P117, P120, P121, P122, P123	
11:30-12:45	**Panel**: Human-Robot Co-Existence	
12:45-13:45	*Lunch*	
13:45-15:45	**GT1** (Kiyoshi Kiyokawa): F26, F69, F101, F35	**CHMI1** (Reinhod Scherer): F33, F100, S105, S46, S61
15:45-16:00	*Coffee Break*	
16:00-18:00	**GT2** (Andres Iglesias): F40, F50, F76, F64	**CHMI2** (Anastasios Bezerianos): F106, F20, S89, S21

18:15-22:00	Two way bus downtown and city signtseeing program (the details to be further announced). Buses to depart from NEC at 18:15 and the return buses from Marina Bay Sands to NEC at 22:00.

4-Oct		
TIME	**Lecture Room LR 1**	**Lecture Room LR 2**
09:00-11:00	**GT3** (Marius Erdt): F60, F83, F88, S77	**CHMI3** (Hassan Ugail): F48, F82, F52, F16
11:00-11:15	*Coffee Break*	
11:15-13:15	**GT4** (Zheng Jianmin): S67, S51, S8, S31, S34, S30	**CHMI4** (Liu Yisi): F19, F41, F78, S99
13:15-14:15	*Lunch*	
14:15-15:15	**Keynote 2**: Christophe Rosenberger	
15:15-16:15	**Keynote 3**: Chen Chun-Hsien	
16:15-17:00	**Industrial talk**: Terry Yin	

17:15-21:30	Bird show and conference banquette at Jurong Bird Park. Buses to depart fro NEC at 17:15. Private bird show: 18:00-19:00. Cocktail reception and dinner: 19:00 - 21:30. Buses depart for NEC at 21:45.

5-Oct		
TIME	**Lecture Room LR 1**	**Lecture Room LR 2**
09:00-11:00	**GT5** (Angelos Amditis): S45, S15, S24, S55, S10, S47	**CSB1** (Christophe Charrier): F75, F81, F92, F85
11:00-11:15	*Coffee Break*	
11:15-12:15	**GT6** (Alexei Sourin): S86, S74, S97	**CSB2** (Patrick Bours): S80, S66, S96
12:15-13:15	**CCCM1** (Henry Johan): F9, F14	**CSB2** (Patrick Bours): S42, S73, S36
13:15-14:15	*Lunch*	
14:15-15:55	**CCCM2** (Bodo Urban): F37, S68, S54, S84	**CHMI5** (Khng Kiat Hui): S32, S95, S90, S118, S17
15:55-16:10	*Coffee Break*	
16:10-17:10	**Keynote 4**: Bodo Urban	
17:10-17:30	Best paper awards; CW2019 presenation; Closing	

	The List of Conference Papers **the name of the presenting author is underlined**
Paper ID	**General Track: Full Papers**
F26	*Modeling Single-Gyroid Structures in Surface Mesh Models for 3D Printing* Jidong Wang, Ruibin Zhao and Mingyong Pang
F35	*Color Preference Differences between Head Mounted Displays and PC Screens* Andreas Siess, Matthias Wölfel and Nico Häffner
F40	*Facial Expression Editing in Face Sketch using Shape Space Theory* Chenlei Lv, Zhongke Wu, Xingce Wang, Dan Zhang, Xiangyuan Liu and Mingquan Zhou
F50	*A Robust and Efficient Algorithm for Multi-body Continuous Collision Detection* Binbin Qi and Mingyong Pang
F60	*Enhancing Sketching and Sculpting for Shape Modeling* Kai Wang, Jianmin Zheng and Hock Soon Seah
F64	*An Experimental Comparison of Text Classification Techniques* Suyash Lakhotia and Xavier Bresson
F69	*MaeSTrO: A Mobile App for Style Transfer Orchestration using Neural Networks* Max Reimann, Mandy Klingbeil, Sebastian Pasewaldt, Amir Semmo, Matthias Trapp and Jürgen Döllner
F76	*What User Interface to Use for Virtual Reality? 2D, 3D or Speech–A User Study* Yannick Weiß, Daniel Hepperle, Andreas Sieß and Matthias Wölfel
F83	*An Automatic Method for Semantic Focal Feature Point Tracking of 3D Human Model in Motion Sequence* Peng Xiaoyu, Tan Xiaohui and Wang Kang
F88	*Self-Training System for Tennis Shots with Motion Feature Assessment and Visualization* Masaki Oshita, Takumi Inao, Tomohiko Mukai and Shigeru Kuriyama
F101	*LifeBrush: Painting Interactive Agent-based Simulations* Timothy Davison, Faramarz Samavati and Christian Jacob
	General Track: Short Papers
S8	*Autonomous Virtual Player in a Video Game Imitating Human Players: the ORION Framework* Cédric Buche, Cindy Even and Julien Soler
S10	*Training an FCN with Synthetic Images for Component Segmentation with Applications in Orientation Estimation and Image Inpainting* Achim Rehberger, Kai Weber and Yvonne Jung
S15	*Glossy Reflections for Mixed Reality Environments on Mobile Devices* Tobias Schwandt, Christian Kunert and Wolfgang Broll
S24	*Text to 3D Model of Chinese Ancient Architecture* Yan Wang, Pu Ren, Mingquan Zhou, Wuyang Shui and Pengbo Zhou
S30	*Reproducing Implicit Curves with Sharp Features* Jingjie Zhao, Jidong Wang, Ruibin Zhao and Mingyong Pang
S31	*On Multiple-view Matrix Based 3D Reconstruction from Multiple-view Images* Hui-Min Huang, Rui-Bin Zhao and Ming-Yong Pang
S34	*A Benchmark for Distance Measurements* Ulrich Krispel, Dieter W. Fellner and Torsten Ullrich

S45	*Computer-aided Sugoroku Games in the Edo Period Using Interactive Techniques for Museum Exhibits* Asako Soga, Masahito Shiba and Takuzi Suzuki
S47	*Towards Asynchronous Video-haptic Interaction in Cyberspace* Guo Song and Alexei Sourin
S51	*A Framework for 3D Object Segmentation and Retrieval using Local Geometric Surface Features* Dimitrios Dimou and Konstantinos Moustakas
S55	*A Figurative and Non-topological Approach to Mathematical Visualization* Atsushi Miyazawa, Masanori Nakayama and Issei Fujishiro
S67	*Bot Believability Assessment: a Novel Protocol & Analysis of Judge Expertise* Cindy Even, Anne-Gwenn Bosser and Cédric Buche
S74	*Effects of Electrical Pain Stimuli on Immersion in Virtual Reality* Matthias Wölfel and Joey Schubert
S77	*Real-Time Art-Directed Charcoal Cyber Arts* Yee Xin Chiew, Hock Soon Seah and Santiago E. Montesdeoca
S86	*GPS Trail Visualizer for Online Communities* Andreas Chrisna Mayong, Vajisha U. Wanniarachchi, Owen Noel Newton Fernando and May Oo Lwin
S97	*Parallel 3D Skeleton Extraction using Mesh Segmentation* Iason Manolas, Aris Lalos and Konstantinos Moustakas

	Track on Cognitive Human-machine Interaction: Full Papers
F16	*Force-Based Evolutionary Computation Approach for Automatic Skeletal Motion Learning in Human Animation* Francisco Calatayud, Luis de la Vega-Hazas and Andrés Iglesias
F19	*Stable Feature Selection for EEG-based Emotion Recognition* Zirui Lan, Olga Sourina, Lipo Wang, Yisi Liu, Reinhold Scherer and Gernot R. Müller-Putz
F20	*EEG-based Cadets Training and Performance Assessment System in Maritime Virtual Simulator* Yisi Liu, Zirui Lan, Olga Sourina, Hui Ping Liew, Gopala Krishnan, Dimitrios Konovessis and Hock Eng Ang
F33	*Classifying Brain Activities in Perception of Shape-analogous English Letters Based on EEG Signal* Rohit Bose, Sim Kuan Goh, Kian F Wong, Nitish Thakor, Anastasios Bezerianos and Junhua Li
F41	*Computational Analysis of Smile Weight Distribution across the Face for Accurate Distinction between Genuine and Posed Smiles* Ahmad Al-dahoud and Hassan Ugail
F48	*Sign Words Annotation Assistance using Japanese Sign Language Words Recognition* Natsuki Takayama and Hiroki Takahashi
F52	*REVAM: a Virtual Reality Application for Inducing Body Size Perception Modifications* Cédric Buche and Nathalie Le Bigot
F78	*Neural Mechanisms of Social Emotion Perception: An EEG Hyper-scanning Study* Li Zhu, Fabien Lotte, Gaochao Cui, Junhua Li, Changle Zhou and Andrezj Cichocki
F82	*Investigation on the Correlation between Eye Movement and Reaction Time under Mental Fatigue Influence* Vianney Renata, Fan Li, Ching-Hung Lee and Chun-Hsien Chen
F100	*Exactly Periodic Spatial Filter For SSVEP Based BCIs* Kiran Kumar G.R. and Ramasubba Reddy M.
F106	*Powering Up Attentional Focus: Validating a school-based deep breathing intervention with mobile EEG—a pilot exploration* Khng Kiat Hui and Ravikiran Mane
	Track on Cognitive Human-machine Interaction: Short Paper
S17	*Computational Intelligence CSA-Based Approach for Machine-Driven Calculation of Outline Curves of Cutaneous Melanoma* Akemi Gálvez and Andrés Iglesias
S21	*EEG-based Evaluation of Mental Fatigue Using Machine Learning Algorithms* Yisi Liu, Zirui Lan, Han Hua Glenn Khoo, King Ho Holden Li, Olga Sourina and Wolfgang Mueller-Wittig
S32	*Designing a Digital Fitness Game System for Older Adults in Community Settings* Jinhui Li, Mojisola Erdt, James Chong Boi Lee, Harsha Vijayakumar, Caroline Robert and Yin-Leng Theng
S46	*Cross Dataset Workload Classification Using Encoded Wavelet Decomposition Features* Wei Lun Lim, Olga Sourina and Lipo Wang
S61	*A Visual Keyboard System using Hybrid Dual Frequency SSVEP Based Brain Computer Interface with VOG Integration* Saravanakumar D. and Ramasubba Reddy M.
S89	*A Novel Visual Keyboard System for Disabled People/Individuals using Hybrid SSVEP Based Brain Computer Interface* Saravanakumar D. and Ramasubba Reddy M.
S90	*Promoting Healthy and Active Ageing Through Exergames: Effects of Exergames on Senior Adults' Psychosocial Well-being* Chen Li, Jinhui Li, Tan Pham Phat, Yin-Leng Theng, and Bing Xun Chia
S95	*Prediction of Negative Symptoms of Schizophrenia from Objective Linguistic, Acoustic and Non-verbal Conversational Cues*. Debsubhra Chakraborty, Shihao Xu, Zixu Yang, Victoria Chua, Yasir Tahir, Justin Dauwels, Nadia Magnenat Thalmann, Bhing-Leet Tan and Jimmy Lee
S99	*Personas and Emotional Design for Public Service Robots: A Case Study with Autonomous Vehicles in Public Transportation* Penny Kong, Henriette Cornet and Fritz Frenkler
S105	*Predicting Ordinal Level of Sedation from the Spectrogram of Electroencephalography* Haoqi Sun, Sunil B. Nagaraj and M. Brandon Westover

S118	*Improved User Interface for a Virtual Integrated Therapy for Active Living (VITAL) – Health Box: An Elderly Perspective* Bing Xun Chia, Chuan Cheng, May Thet Hnin, Zwe Marn Tun Lwin, Tan Phat Pham, Quoc Nam Tran Nguyen and Yin-Leng Theng

	Track on Cybersecurity and Biometrics: Full Papers
F75	*A 3D Approach for the Visualization of Network Intrusion Detection Data* Wei Zong, Yang-Wai Chow and Willy Susilo
F81	*Enhancing the Security of Transformation Based Biometric Template Protection Schemes* Loubna Ghammam, Morgan Barbier and Christophe Rosenberger
F85	*Cross-Pocket Gait Recognition* Patrick Bours and Thilo Denzer
F92	*User Dependent Template Update for Keystroke Dynamics Recognition* Abir Mhenni, Estelle Cherrier, Christophe Rosenberger and Najoua Essoukri Ben Amara
	Track on Cybersecurity and Biometrics: Short Papers
S36	*A New Black Box Evaluation Protocol for Biometric Systems* Antoine Cabana, Christophe Charrier and Alain Louis
S42	*Experiments on Deep Face Recognition using Partial Faces* Ali Elmahmudi and Hassan Ugail
S66	*Kinect vs Lytro in RGB-D Face Recognition* Valeria Chiesa and Jean-Luc Dugelay
S73	*RHU Keystroke Touchscreen Benchmark* Mohamad El-Abed, Mostafa Dafer and Christophe Rosenberger
S80	*Analysis of Keystroke Dynamics For the Generation of Synthetic Datasets* Denis Migdal and Christophe Rosenberger
S96	*A Client based Anomaly Traffic Detection and Blocking Mechanism by Monitoring DNS Name Resolution With User Alerting Feature* Yong Jin, Kunitaka Kakoi, Nariyoshi Yamai, Naoya Kitagawa and Masahiko Tomoishi

	Track on Cyber Cities and Cyber Manufacturing: Full Papers
F9	*Towards Automatic Optical Inspection of Soldering Defects* Wenting Dai, Abdul Mujeeb, Marius Erdt and Alexei Sourin
F14	*Unsupervised Surface Defect Detection Using Deep Autoencoders and Data Augmentation* Abdul Mujeeb, Wenting Dai, Marius Erdt and Alexei Sourin
F37	*An Appearance-Driven Method for Converting Polygon Soup Building Models for 3D Geospatial Applications* Kan Chen, Henry Johan and Marius Erdt
	Track on Cyber Cities and Cyber Manufacturing: Short Papers
S54	*Securing Spatial Data Infrastructures in the Context of Smart Cities* Kanishk Chaturvedi, Andreas Matheus, Son H. Nguyen and Thomas H. Kolbe
S68	*Using Mobile Phone Data to Determine Human Mobility Patterns in Paris* Eric Valega Prawirodidjojo, Rui Jie Quek, Bu–Sung Lee, Vincent Gauthier and Markus Schläpfer
S84	*Cloud-Based Dynamic Streaming and Loading of 3D Scene* Budianto Tandianus, Hock Soon Seah, Tuan Dat Vu and Anh Tú Phan

	Poster Papers
P109	*The Role of Wearable Technology in Children's Creativity* Rojin Vishkaie
P110	*Deep Learning with Long Short-term Memory Recurrent Neural Network for Daily Container Volumes of Storage Yard Predictions in Port* Yinping Gao, Daofang Chang, Chun-Hsien Chen and Ting Fang
P111	*The Behavior Symptoms of Undergraduates' Social Anxiety in the Virtual World* Yungang Wei, Lin Huang, Wei Wang, Yanqiu Zhang and Zihan Wang
P112	*Effects of Sound Volume Change When Squeezing a Virtual Soft Object with a Bare Hand* Mie Sato, Zentaro Kimura, Yuki Tanaka, Natsumi Motoura, Naoki Hashimoto and Arie E. Kaufman
P115	*Outliers Removal of Highly Dense and Unorganized Point Clouds Acquired by Laser Scanners in Urban Environments* Gerasimos Arvanitis, Aris S. Lalos, Konstantinos Moustakas and Nikos Fakotakis
P116	*Real-time Haptic Rendering of Double-points Interaction* Xinli Wu, Wenzhen Yang, Minxiong Zhang, Xin Huang, Xuxiao Wu and Zhigeng Pan
P117	*Towards Citizen-powered Cyberworlds for Environmental Monitoring* Maria Krommyda, Evangelos Sdongos, Stefano Tamascelli, Athanasia Tsertou, Geli Latsa and Angelos Amditis
P120	*Are Online Co-Adaptive Sensorimotor Rhythm Brain-Computer Interface Training Paradigms Effective?* José Diogo Cunha and Reinhod Scherer

P121	*Augmented Virtualized Observation of Hidden Physical Quantities in Occupational Therapy.* Alberto Fornaser, Mariolino De Cecco, Paolo Tomasin, Matteo Zanetti, Giovanni Guandalini, Barbara Gasperini, Patrizia Ianes, Francesco Pilla and Rossella Ghensi
P122	*Multilingual Semantic Cyberspace of Scientific Papers Based on WebVR Technology* Michael Charnine, Konstantin Kuznetsov and Oleg Zolotarev
P123	*Fatigue Prediction and Intervention for Continuous Play in Video Games* Thanat Damrongwatanapokin and Koji Mikami