

ICOT 2015
Main Technical Program
The Hong Kong Polytechnic University (PolyU)

Sunday, 20 December 2015

Registration

M1607, PolyU
0800 - 0830

Opening Ceremony

M1603, PolyU
0830 - 0900

Prof. Alex Wai, Vice President (Research Development), PolyU
Prof. Jhing-Fa Wang, General Co-chair

Keynote Session 1 (Chaired by Prof. Jiannong Cao)

M1603, PolyU
0900 - 1000

Orange Technology and Trend of Future Information Technology

Prof. Jhing-Fa Wang
(President, Tajen University, Taiwan and Chair Professor, National Cheng Kung University, Taiwan)

Invited Talk Session 1 (Chaired by Prof. Christian Becker)

M1603, PolyU
1030 - 1200

Computational Medicine: When Computer Science Meets Modern Health Care

Prof. Danny Z. Chen (Professor, University of Notre Dame)

Designing Pervasive Technologies for Managing Mood Disorders – Experimental Studies, Algorithms and App Development

Dr Sriram Chellappan (Associate Professor, University of South Florida)

Orange Speech Technologies: Towards a Healthy, Happy and Warm Society

Prof. Lei Xie (Professor, Northwestern Polytechnical University)

Parallel Session 1

M106 - M108, PolyU
1330 - 1500

RS01 - Warming Care Technology

Session Chair: Ichiro Satoh

M106, PolyU
1330 - 1400

Human Action Recognition System for Elderly and Children Care Using Three Stream ConvNet (Paper ID: 38)

Chang-Di Huang, Chien-Yao Wang, Jia-Ching Wang

An Image Segmentation Method Based on Simple Linear Iterative Clustering and Graph-based Semi-supervised Learning (Paper ID: 40)

Junliang Ma, Xili Wang, Bing Xiao

SS01A - System and Application for Happiness (1)

Session Chairs: An-Chao Tsai and Ta-Wen Kuan

M106, PolyU
1400 - 1500

HAPPINESS/SUFFERING Factors Recognition Based on Point-Wise Mutual Information (Paper ID: 46)

Bo-Hao Su, Po-Chuan Lin, Jing-Min Chen, Jhing-Fa Wang

Customized Dialogue System based on Biographical knowledge Retrieval for Elderly (Paper ID: 47)

Bo-Hao Su, Ping-Wen Fu, Jhing-Fa Wang, Ta-Wen Kuan, Jeng-Ping Chiu

A Survey of Visual Lip Reading and Lip-Password Verification (Paper ID: 34)

Seksan Mathulaprangs, Chien-Yao Wang, Aufaclav Zatu Kusum, Tzu-Chiang Tai, Jia-Ching Wang

A Review on Speech Separation using NMF and Its Extensions (Paper ID: 36)

Tuan Pham, Yu-An Chen, Yu-An Chen, Jia-Ching Wang

Gaussian Process Based Text Categorization for Healthy Information (Paper ID: 37)

Sih-Huei Chen, Yuan-Shan Lee, Tzu-Chiang Tai, Jia-Ching Wang

SS02 - Social Signal and Information Processing for Emotional Well-being

Session Chair: Chung-Hsien Wu

M107, PolyU

1330 - 1500

Chinese Spelling Checker in Reading Machine for Visually Impaired Persons (Paper ID: 10)

Jui-Feng Yeh, Kai-Hsiang Yu, Chen-Da Tsai

iDianNao: an Orange Technology that Recommends Volunteer Opportunities to Older Adults (Paper ID: 24)

Wen-Chieh Fang, Meng-Che Hsieh, Pei-Ching Yang, Wen-Gan Li, Ching-Ju Chiu, Jung-Hsien Chiang

Data Collection of Elicited Facial Expressions and Speech Responses for Mood Disorder Detection (Paper ID: 33)

Kun-Yi Huang, Chung-Hsien Wu, Yu-Ting Kuo, Hsian-Hsuan Yen, Fong-Lin Jang, Yu-Hsien Chiu

Capture Friendship Characteristic in Dynamic Social Networks (Paper ID: 41)

Yi-Cheng Chen, Bing-Yang Chiang, Hsiu-Chieh Hung, Sheng-Yuan Peng, Yu-Jia Gao

Extraction and Representation of Nursing Diagnosis for Assisted Assessment and Affective Analysis (Paper ID: 42)

Yu-Hsien Chiu, Wei-Hao Chen, Yu-Wei Hung, Hsien-Chang Wang, Kun-Yi Huang, Chung-Hsien Wu

Sentiment Classification of Short Texts based on Semantic Clustering (Paper ID: 61)

Yunchao He, Chin-Sheng Yang, Liang-Chih Yu, K. Robert Lai, Weiyi Liu,

SS03 - Community Empowerment and Hedonic/Eudaimonic Wellbeing

Session Chair: Shyh-Nan Liou

M108, PolyU

1330 - 1445

Impact of Mobile-based Communication App on Disease Self-management and Emotional Well-being for Older Adults Living in The Community with Diabetes (Paper ID: 18)

Ching-Ju Chiu, Yung-Chen Yu, Keng-Tang Chung, Jung-Hsien Chiang

An fMRI study of happiness by inducing positive affect state (Paper ID: 54)

Han-Shin Jo, Yang-Yen Ou, Chun-Chia Kung

Building the Empowered Community towards a Service Design Perspective: Case Study of West Central District in Tainan (Paper ID: 55)

Chia-Han Yang, Shun-Nung Huang

Study on the Promotion of the Meaningful Happiness of the Elderly with the Spatial and Social Supportive System Constructed by the Community - A practice in Yin-Tong community in Tainan city, Taiwan (Paper ID: 74)

Shihming Chen, Chipang Lu, Likuang Chen, Yichung Huang, Yijen Lin

Invited Talk Session 2 (Chaired by Dr Jia-Ching Wang)

M1603, PolyU
1515 - 1615

Unobtrusive Smartphone-based Mobile Health Systems: Experiences with Biological Rhythm Monitoring

Dr Guoliang Xing (Associate Professor, Michigan State University)

Mood Disorder Detection Based on Elicited Speech Responses Using Latent Affective Structure Modeling

Prof. Chung-Hsien Wu (Distinguished Professor, National Cheng Kung University)

Panel Session

Chair: Prof. Jiannong Cao, The Hong Kong Polytechnic University

M1603, PolyU
1615 - 1745

Monday, 21 December 2015

Registration

M1607, PolyU
0800 - 0830

Keynote Session 2 (Chaired by Prof. Jhing-Fa Wang)

M1603, PolyU
0830 - 0930

Smart Health at the age of Big Data - Medical Data Mining and Innovative Applications with Patient Monitoring and Aging Care

Prof. Yanchun Zhang
(Professor, Victoria University)

Invited Talk Session 3 (Chaired by Prof. Lei Xie)

M1603, PolyU
0930 - 1030

Personal-Level Carbon Emission Allowance

Prof. Ichiro Satoh (Professor, National Institute of Informatics)

Cyber I, and Cyber We - How the Internet Creates New Self-identity and Social Life

Dr Shyh-Nan Liou (Associate Professor, National Cheng Kung University)

Invited Talk Session 4 (Chaired by Dr Ta-Wen Kuan)

M1603, PolyU
1100 - 1200

Social Pervasive Sensing

Prof. Giovanni Pau (Smart Mobility Chair Professor, University Pierre et Marie Curie and Adjunct Professor, Department of Computer Science, UCLA)

Big Data Analytics and Smart Home Technology for Autism Spectrum Disorder Diagnosis and Therapy

Prof. Keith Chan (Dean of Students and Professor, The Hong Kong Polytechnic University)

Parallel Session 2

M106 - M107, PolyU
1330 - 1530

RS02 - Health Technology

Session Chair: Giovanni Pau

M106, PolyU
1330 - 1445

A Kinect-based Oral Rehabilitation System (Paper ID: 22)

Tse-Yu Pan, Yong-Xiang Wang, Ting-Chia Lee, Min-Chun Hu

Compressive Tracking Moving Cells in Time-Lapse Image Sequences (Paper ID: 52)

Chen Ding, Ying Li, Yongsheng Pan, Tao Zhou, Pengcheng Gao, Yong Xia

Snoring and breathing detection based on Empirical Mode Decomposition (Paper ID: 76)

Xin Dang, Ran Wei, Guohui Li

Project Portfolio Selection considering Interdependencies and Preferences in Health and Mental Care (Paper ID: 69)

Shujuan Luo, Sijun Bai

RS03 - Happiness Technology and Index

Session Chair: Sriram Chellappan

M107, PolyU
1330 - 1415

The Pursuit of Happiness: An Empirical Study of BLI of OECD Countries (Paper ID: 27)

Wen-Jen Hsieh, Benny Yang, Jun-Jen Huang

Chinese text extraction for video scene by multi-frame corner matching and heuristic rules (Paper ID: 35)

Zhe Guo, Mengkai Hu, Peitao Chen, Xianfeng Han, Guanping He

The value system characteristics of Chinese online game players (Paper ID: 5)

Chaoguang Wang, Gino Yu

SS01B - System and Application for Happiness (2)

Session Chairs: An-Chao Tsai and Ta-Wen Kuan

M106, PolyU
1445 - 1530

Smart Drug Kit Development under Pharmaceutical Services (Paper ID: 4)

Daih-Huang Kuo, Kuan-Hung Sun, Chen-Ying Su, Cheng-Feng Tai, Shih-Pang Tseng

A Smart Eye Care Algorithm for Handheld Devices (Paper ID: 9)

An-Chao Tsai, Ming-Hsuan Lu, Po-Huai Su, Ta-Wen Kuan, Jhing-Fa Wang

Cheerful Jumping Shot for Happiness Detection (Paper ID: 11)

Yang-Yen Ou, Ta-Wen Kuan, Shih-Pang Tseng, An-Chao Tsai, Jhing-Fa Wang, Jing-Hua Tian

SS05A - Audio/Visual Techniques for Immersive Communication (1)

Session Chairs: Zhonghua Fu and Lei Xie

M107, PolyU

1445 - 1530

Image Matching via Higher Order Structures (Paper ID: 2)

Zhen Zhang, Yanning Zhang, Jinqiu Sun, Li Sun

Research on Collaborative Allocation of the Multi-Agent Based on Equivalent Time (Paper ID: 7)

Xuesi Li, Haobin Shi, Xuanwen Chen, Wenyan Li, Shixiong Wang

Robust Beamforming in the STFT Domain Based on Constrained Minimum Power Combination (Paper ID: 14)

Zhonghua Fu

Parallel Session 3

M106 - M107, PolyU

1545 - 1800

SS01C - System and Application for Happiness (3)

Session Chairs: An-Chao Tsai and Ta-Wen Kuan

M106, PolyU

1545 - 1800

A Survey of Gamification for Healthcare System (Paper ID: 17)

Chun-Hao Wen, Hsin-Yun Hsien, Hsiang-Chi Huang

Willingness of E-care Cloud System Using -Based on a Long-term Caring Institution in Southern Taiwan (Paper ID: 21)

Chen-Ying Su, Cheng-Min Chao, Kuan-Huang Sun, Cheng-Feng Tai, Chai-Wu Liu

Design and implementation of happiness database for fMRI study (Paper ID: 23)

Yang-Yen Ou, Ding-Ruey Yeh, Chun-Chia Kung, Po-Chuan Lin, Ta-Wen Kuan, Jhing-Fa Wang

The personal characteristics of happiness: an EEG study (Paper ID: 25)

Che-Wen Chen, Chia-Yi Chou, Jhing-Fa Wang

A Design of Fuzzy Control for Line Following together with Distance Keeping on Wheel Robot (Paper ID: 26)

Yu-Yao Lee, Ya-Ting Chung, Yang-Ning Lin, Shu-Chiang Chung

An Efficient Smile and Frown Detection Algorithm (Paper ID: 28)

An-Chao Tsai, Ting-Wei Lin, Ta-Wen Kuan, K. Bharanitharan, Jih-Tso Chang, Jhing-Fa Wang

The Development of Image Base, Portable Microfluidic Paper-Based Analytical Device (Paper ID: 63)

Chuan-Pin Lu, Bo-Xian Guo, Zi-Qing Fang, Shu-Chiang Chung

A 3D On-Line Golf Game with Motion Sensing Technology (Paper ID: 70)

Shu-Fen Liu, Chun-I Lin, Chen-Ying Su, Shih-Pang Tseng

Mindfulness Biofeedback Interface (MBI) Design: Challenges and Opportunities (Paper ID: 45)

Xiaobin Wu, Shyhnan Liou

SS05B - Audio/Visual Techniques for Immersive Communication (2)

Session Chairs: Zhonghua Fu and Lei Xie

M107, PolyU

1545 - 1800

A Two-Stage Facial Landmark Localization Method (Paper ID: 15)

Wei Wei, Chunna Tian, Yanning Zhang

Does a QR Code Must Be Black and White? (Paper ID: 16)

Sibing Wang, Tao Yang, Jing Li, Bowei Yao, Yanning Zhang

Externalization Improvement in a Real-time Binaural Sound Image Rendering System (Paper ID: 31)

Yougen Yuan, Zhonghua Fu, Ming Xu, Lei Xie, Qi Cong

A Novel Functional MRI-based Immersive Tool for Dementia Disease Severity Prediction via Spectral Clustering and Incremental Learning (Paper ID: 57)

Wei Huang, Guang Chen

An Object-based Video Authentication Mechanism for Smart-Living Surveillance (Paper ID: 58)

Peng Zhang, Tony Thomas, Tao Zhuo

Hyperspectral Image Denoising from an Incomplete Observation (Paper ID: 62)

Wei Wei, Yanning Zhang, Cong Wang, Chunna Tian

Is Noise Always Harmful? Visual Learning from Weakly-Related Data (Paper ID: 66)

Shenghua Zhong, Yan Liu, Kien A. Hua, Songtao Wu

An Interactive Musical Application with Hand Motion and Gesture Controlled Interface (Paper ID: 71)

Ting-Hsing Huang, Zhen-Qi Zhuang, Chia-Yen Chen, Bao Rong Chang, Po-Chuan Lin, Yang-Yen Ou

Sunset Dawn: using media technology to enhance a global festival of light (Paper ID: 79)

Kingham Tim