

## Program at a glance

Wednesday, 23 August			
	Session 1 (Room : Y201)	Session 2 (Room : Y202)	Session 3 (Room : Y208)
13:30 ~ 15:00	ID 14	ID 17	ID 39
	ID 15	ID 72	ID 53
	ID 26	ID 20	ID 28
	ID 36	ID 38	ID 9
	ID 48		ID 51
15:00 ~ 15:30	Tea Break		
15:30 ~ 17:00	ID 58	ID 42	ID 5
	ID 8	ID 25	ID 12
	ID 10	ID 41	ID 59
	ID 11	ID 45	ID 3
	ID 27	ID 73	
Thursday, 24 August			
	Session 1 (Room : Y201)	Session 2 (Room : Y202)	Session 3 (Room : Y208)
10:00 ~ 12:00	ID 61	ID 35	ID 77
	ID 67	ID 24	ID 52
	ID 46	ID 30	ID 32
	ID 40	ID 37	ID 66
	ID 13	ID 49	ID 54
	Posters (Room : Y203~Y206)		
8/24 10:00~12:00	ID 4,22,23,29,34,43,44,55,63,69,71,76,78		
8/24 13:30~15:30	ID 2,6,7,16,18,19,47,60,62,64,68,74		

# Technical Program

## Oral Session

Wednesday, 23 August		
Session 1 (Room : Y201)		
Session Chair : <i>Tien-Lung Sun</i>		
13:30 ~ 15:00	ID 14	Data analysis of feature extraction for characterizing exercise performance by motion sensor
		<i>Shih-Hai Chen, Chi-Han Wu, Tien-Lung Sun</i>
	ID 15	Data analysis of exercise performance in fitting equipment by motion sensor
		<i>Shih-Hai Chen, Chi-Han Wu, Tien-Lung Sun</i>
	ID 26	Analysis of motion-sensor data by circuit training for a health promotion campaign
		<i>Chia-Hsuan Lee, Chen-Yi Lee, Tien-Lung Sun</i>
	ID 36	Joint angle measurement by stretchable strain sensor
		<i>Hiroyuki Nakamoto, Tokiya Yamaji, Ichiro Hirata, Hideo Ootaka, Futoshi Kobayashi</i>
	ID 48	Inertial sensor enabled tug data collection for elderly balance assessment
		<i>Tien-Lung Sun, Chia-Hsuan Lee, Gustavo Adolfo Miranda Salgado, Shih-Hai Chen, Chi-Han Wu, Da-Ming Hung, Chien-Hua Huang, Chun Pei</i>
15:00 ~ 15:30	Tea Break	
Session Chair : <i>Ichiro Hirata</i>		
15:30 ~ 17:00	ID 58	An application of human factors approaches to reduce MSD risks for the quartz oscillator inspection task
		<i>Cheng-Shih Tasi, Shih-Yu Chung, Ray F. Lin</i>
	ID 8	Development and assessment of an aid for reducing injury risk of neck among computer workers
		<i>Hsieh-Ching Chen, Tzu-Yun Hung, Yung-Ping Liu</i>
	ID 10	Understanding factors that affect the evaluation of user satisfaction
		<i>Sayoko Doi, Toshihisa Doi, Toshiki Yamaoka</i>
	ID 11	A pressure distribution measurement system for product development
		<i>Ichiro Hirata, Keiji Ootani, Yasunori Goto</i>
ID 27	An evaluation model of web quality service based on cloud model and grey relational analysis	
	<i>Ting-Cheng Chang, Hui Wang, Chuen-Jiuan Jane</i>	

<b>Wednesday, 23 August</b>			
<b>Session 2(Room : Y202)</b>			
13:30 ~ 15:00	Session Chair : <i>Peng-Cheng Sung</i>		
	ID 17	The effects of pressing frequency and flashing pattern of indicator lamps on workloads for simulated push-button operation <i>Peng-Cheng Sung, Jia-Feng Tsai, Shu-Zon Lou, Cheng-Lung Lee, Huey-Long Chen</i>	
	ID 72	Effects of input devices on task performance for smartphone operating <i>Cheng-Lung Lee, Chun-Han Huang, Shih-Yi Lu, Peng-Cheng Sung, Yi-Tsong Pan</i>	
	ID 20	Behavioral intention to join active aging learning center <i>Mei-Yu Ku, Ching-Ter Chang, Pei-Yin Shen, Yu-Ching Chang Chien</i>	
	ID 38	The study of female maximum acceptable force for thumb press insertion task with middle and high duty cycles in Taiwan <i>Chia-Ying Lin, Ei-Wen Lo, Chih-Yong Chen, Liwen Liu</i>	
	15:00 ~ 15:30		Tea Break
	15:30 ~ 17:00	Session Chair : <i>Toshiki Yamaoka</i>	
		ID 42	The extraction of user requirements using Stories <i>Ai Murata, Toshiki Yamaoka</i>
		ID 25	A new idea creation method based on constraints <i>Toshiki Yamaoka</i>
		ID 41	Suggestion of the time model defined Temporal model in interface design <i>Yukari Waki, Toshiki Yamaoka</i>
ID 45		A proposal of service design considering a sale of Gekkeikan's Sake <i>Saori Nishino, Toshiki Yamaoka</i>	
ID 73		Modeling users' data traces in ambient assisted living environments <i>Vahid Ghasemi, Ali A. Pouyan</i>	

<b>Wednesday, 23 August</b>			
<b>Session 3(Room : Y208)</b>			
13:30 ~ 15:00	Session Chair : <i>Cheng-Li Liu</i>		
	ID 39	The effect of working posture and gender on grip strength and endurance time <i>Yi-Chen Chiu, Ei-Wen Lo, Chih-Yong Chen, Liwen Liu</i>	
	ID 53	The static and dynamic coefficient of friction analysis for three different kinds of industrial safety footwear <i>Ching-Chung Chen, Zhi-Xuan Chen, Chih-Lin Chang, Fang-Ling Lin</i>	
	ID 28	Effects of chair rise strategies on joint loads <i>Han-Xiong Gao, Yu-Chi Chen, Shu-Zon Lou, Cheng-Lung Lee, Peng-Cheng Sung</i>	
	ID 9	A study of visualized response surface method model for assessing postural balance <i>Che-Jung Yang, Chin-Mei Chou</i>	
	ID 51	A Study on an effectiveness of GUI parts (an arrow, a figure, a color-coding) <i>Fumika Kokido, Toshiki Yamaoka</i>	
	15:00 ~ 15:30		Tea Break
	15:30 ~ 17:00	Session Chair : <i>Toly Chen</i>	
		ID 5	Symptom cluster in patients presenting to emergency department with possible ACS <i>Taichih Huang, Chieh Lee</i>
		ID 12	A study on the acceptance of innovative technologies in clothing retail <i>Heloise Chalot, Pei-Luen Patrick Rau, Zhi Guo</i>
ID 59		Effects of inter-organizational systems implementation on supply chain capability and firm performance: evidence from Taiwan bicycle industry <i>Hsi-Liang Tseng, Chien-Pang Lee, Ching-Tornng Lin</i>	
ID 3		An entropy-consensus agent-based heterogeneous fuzzy collaborative intelligence approach for estimating the unit cost of a semiconductor <i>Toly Chen, Yu-Cheng Wang</i>	

<b>Thursday, 24 August</b>		
<b>Session 1(Room : Y201)</b>		
10:00 ~ 11:15	Session Chair : <i>Chen-Tung Chen</i>	
	ID 61	The impacts of e-impulse buying on cognitive dissonance, satisfaction, and loyalty: the perspective of regulatory focus theory <i>Chien-Wen Chen, Ching-Torng Lin, Shu Jing Wang</i>
	ID 67	Integrating linguistic VIKOR method and social relation analysis method for ambient intelligence product project selection <i>Chen-Tung Chen, Sue-Fen Huang, Wei-Zhan Hung</i>
	ID 46	User-experienced interaction design of a second screen as television and social platform <i>Chien-Hsiung Chen, Chia-Huei Sher</i>
	ID 40	How can agents build good relationships with human beings? : optimal rate of mimicry in human-agent interaction <i>Yumiko Shinohara, Hirofumi Hayakawa, Natsuki Oka, Yukiko Nishizaki</i>
	ID 13	A comparative study on applicability of co-clustering models to collaborative filtering <i>Katsuhiro Honda, Seiki Ubukata, Akira Notsu</i>

<b>Thursday, 24 August</b>		
<b>Session 2(Room : Y202)</b>		
10:00 ~ 11:15	Session Chair : <i>Chin-Mei Chou</i>	
	ID 35	Soft tactile sensations improve human–robot interaction
		<i>Yukiko Nishizaki, Hirofumi Hayakawa, Natsuki Oka</i>
	ID 24	A study of systems approach in service design
		<i>Kazutoshi Sakaguchi, Seiko Shirasaka</i>
	ID 30	On improvement of human factor interface of digital micro machine tools
		<i>Tsu-Wu Hu, Kuan-Wu Lin</i>
	ID 37	Study of postural balance capacity in young adults
		<i>Tatiana Diaz, Yi-Ting Chiu, Chin-Mei Chou</i>
	ID 49	Study of body balance at various heights for young adults
		<i>Yi-Ting Chiu, Chin-Mei Chou, Che-Jung Yang, Jinghong Xiong, Tatiana Diaz</i>

**Thursday, 24 August**

**Session 3(Room : Y208)**

Session Chair : <i>Chien-Chi Chang</i>		
10:00 ~ 11:15	ID 77	Human centered design in a three in one automated uncoiler machine
		<i>Chun-Shih Cheng, Te-Hung Chen, Wei-Hung Chang, Mao-Jiun Wang, Jen-Yuan Chang</i>
	ID 52	Using Kansei engineering to design hand exoskeleton device: a preliminary study
		<i>Chia-Chen Kuo, Mao-Jiun Wang, Chien-Chi Chang, Shu-Wei Pu, Jen-Yuan Chang</i>
	ID 32	Font size and text contrast effects on optical head-mounted display legibility
		<i>Chih-Yu Hsiao, Yu-Ting Lu, Chien-Chi Chang, Mao-Jiun Wang</i>
	ID 66	The comparison of anthropometric data between taiwanese male and female military personnel
		<i>Chien-Chun Pao, Yuh-Chuan Shih, Chin-Jung Chao</i>
	ID 54	A hybrid PCA and BPN approach to failure time prediction in the engines
		<i>Yu Cheng Wang</i>

## Poster Session

Thursday, 24 August

Session Room : Y203~Y206

10:00 ~ 12:00	ID 4	Using dramaturgical theory to investigate the effect of anxiety and trust on sense of service value – a study of the patient received medical examined
		<i>Pei-Chun Chen, Chao-Wei Chin, Yang-Kun Ou</i>
	ID 22	Developing and testing the addiction inventory on smart phone
		<i>Hsien-Wei Tseng, Yang-Han Lee, Yu-De Liao, Ting-Wei Lin, Yu-Hsuan Lin</i>
	ID 23	Study the sport RRI and testing the human exercise parameters associate with feedback control system on the treadmill
		<i>Hsien-Wei Tseng, Yang-Han Lee, Chien-Da Huang, Ting-Wei Lin</i>
	ID 29	The study of the relationship of “Humanity” and “Linguistic modality” in design
		<i>Keita Yasui</i>
	ID 34	The study of appropriate touchscreen size of smartphone to fit various people’s hands based on hand dimension, operation efficiency and fatigue
		<i>Yu-Cheng Lin</i>
	ID 43	Effectiveness of an approach for mental models measurement
		<i>Ryota Mori</i>
	ID 44	A study on the Boolean algebra approach for the evaluation of observation, usability and the design
		<i>Yukari Senda, Toshiki Yamaoka</i>
	ID 55	Menopause, job stress, exercise and sleep quality
		<i>Zhi-Xuan Chen, Ching-Chung Chen, Chih-Lin Chang</i>
	ID 63	Taxonomy of in-vehicle visual icon of passenger cars
		<i>Chia-Fen Chi, Ratna Sari Dewi</i>
ID 69	Experience and Taguchi-Based CAE method for finding an optimal structure of a column-type grinding machine	
	<i>Hui-Cun Shen, Kun-Chieh Wang</i>	
ID 71	Estimation equation of male body volume by 3D scanner	
	<i>Hsin-Hung Tu</i>	
ID 76	Psychophysically determined the carrying capacity during combined carrying tasks	
	<i>Hsiu-Chen Chung, Swei-Pi Wu</i>	
ID 78	The effectiveness of digital gardening game for the upper extremity function of stroke patients	
	<i>Mei-Hsiang Chen, Lan-Ling Huang</i>	



**Thursday, 24 August****Session Room : Y203~Y206**

13:30 ~ 15:30	ID 2	A study of energy efficiency in manual lifting tasks <i>Hsin-Chieh Wu, Wei-Hsien Hong, Min-Chi Chiu</i>
	ID 6	Non-exercise predictive model for maximal oxygen consumption of Taiwan male military personnel <i>Yuh-Chuan Shih, Yao-Chung Kuo</i>
	ID 7	The effect of 3000K light on human responses in different ages <i>Chin-Mei Chou, Ru-Yu Huang, Ya-Hui Chiang</i>
	ID 16	Design and evaluation of a programming courseware <i>Ying-Lien Lee, Kai Wang</i>
	ID 18	The effects of layout types and information display atmospheres on presence for the elderly in 3d virtual art gallery by using handheld mobile devices <i>Cheng-Li Liu, Shiaw-Tsyr Uang</i>
	ID 19	E-stickers characteristics and emotional expression <i>Tsun-Hung Huang, Wan-Yu Wu, Min-Chi Chiu</i>
	ID 47	A study of suitable lighting environment for inspectors <i>Chin-Mei Chou, Bo-Xuan Li, Jing-Lan Chen, Xue Cheng, Kai-Xi Yang</i>
	ID 60	Using user interface and experience to explore visualization representation of social big data <i>Kuo-Wei Su, Yu-Wun, Wang</i>
	ID 62	A study of designing learning aids system for school-age children <i>Ming-Hsuan Hsieh; Hsin-Fu Huang</i>
	ID 64	Developing intelligent physical workload evaluation system based on heart rate analysis <i>Hsin-Chieh Wu, Shih-Hao Tung, Mao-Lun Chiang</i>
	ID 68	A case study on applying PDCA method to reduce occupational disaster events for the major backlight module manufacturers <i>Ching-Jen Huang, Yueh-Chen Cheng</i>
	ID 74	Intelligent cloud manufacturing model for industry 4.0 <i>Chu-Chai Henry Chan, Ping-Chen Tsai</i>