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Welcome to Shanghai Conferences

Dear Professors and distinguished delegates,

Welcome to 2015 IACSIT Shanghai Conferences. On behalf of IACSIT organization, I would like to thank all the Conference Chairs, Program Chairs and the technical Committees. Their high competence and professional advice enable us to prepare the high-quality program. We hope all of you have a wonderful time at the conference and also in Shanghai.

We believe that by this excellent conference, you can get more opportunity for further communication with researchers and practitioners with the common interest in Information and Knowledge Management, Frontiers of Educational Technologies, Information and Network Security and Machine Learning and Computing.

In order to hold more professional and significant international conferences, your suggestions are warmly welcomed. We look forward to meeting you again next time.

Best Regards!

Yours sincerely,
Emma Wang
Director of Conference Department, IACSIT

Note:

- ✧ You can also register at any working time during the conference
- ✧ Certificate of Participation can be collected at the registration counter.
- ✧ The organizer won't provide accommodation, and we suggest you make an early reservation.
- ✧ Please get the notification for your paper printed out and it is required when you register on desk.

Warm Tips for Oral Presentation:

- ✧ Get your presentation PPT or PDF files prepared
- ✧ Regular oral presentation: about 13 minutes (including Q&A)
- ✧ Keynote speech: about 40 minute (including Q&A)
- ✧ Laptop (with MS-Office & Adobe Reader), projector & screen, laser sticks will be provided by the conference organizer
- ✧ Please keep your belongings (laptop and camera etc.) with you

Announcement

✧ All accepted papers of **ICIKM 2015** will published in one of the following Journals:

International Journal of Knowledge Engineering
Abstracting/Indexing: DOAJ, Electronic Journals Library, Engineering & Technology Digital Library, Google Scholar, Crossref and ProQuest

Journal of Advances in Information Technology
Abstracting/Indexing: INSPEC; EBSCO; ULRICH's Periodicals Directory; WorldCat; CrossRef; Genamics JournalSeek; Google Scholar; Ovid LinkSolver; etc.

✧ All accepted papers of **ICFET 2015** will be published in the following Journals:

International Journal of Learning and Teaching
Abstracting/Indexing: Google Scholar; Engineering & Technology Digital Library; etc. .

✧ All accepted papers of **ICINS 2015** will be published in one of the following Journals:

Journal of Computers
Abstracting/Indexing: DBLP, EBSCO, DOAJ, ProQuest, INSPEC, ULRICH's Periodicals Directory, WorldCat, CNKI,etc.

International Journal of Communications
Indexed by Scopus and EI Compendex

✧ All accepted papers of **JCMLC2015** will be published in the following Journals:

Journal of Machine Learning and Computing
Indexed by EI (INSPEC, IET), Google Scholar, Crossref, ProQuest, Electronic Journals Library, and DOAJ

For the journal publication schedule, some authors could not get the journal on conference site. We'll post the journal after publication. A CD including all registered papers will be handed out to the presenters.

***Attention:**
One excellent presentation will be selected from each session and the author of excellent presentation will be awarded the certificate during the dinner.

IACSIT Committee

Conference Venue

Shanghai Yalong international hotel

Address: Shanghai Pudong New Area Gushan Road, 688

Hotel switchboard: 021-61601111

Tel: +86 21 61601111

Fax: +86 21 61602020

Shanghai Yalong international hotel is 4-star hotel which is managed by One home International hotel management Co., Ltd., Located in the lujiazui financial center, only 5-min to the Shanghai New International Expo. Center, 5-min to Shanghai World Expo., 15 minutes to the city center, 30-min to Hongqiao airport and 35-min to Pudong international airport.

32 thousand proportion of construction and 409 rooms together with meeting rooms, lobby bar, Chinese and Western restaurants, Hokkaido Hot Pot, and health club facilities.

The hotel will provide considerate and customized service to you. Here you can personally experience elegant atmosphere of the hotel and our constant and close service.

Technical Program at a Glance

First Day				
July 29	**Lobby**	***10:00-17:00***	**Registration**	
Second Day				
July 30 9:00-11:55	**Venue: Macau**	***9:00-9:10***	**Opening Remarks**	**Prof. Chen-Huei Chou**
		9:10-9:50	**Keynote Speech I**	**Prof. Liansheng Tan**
		9:50-10:30	**Keynote Speech Ⅱ**	**Prof. D P Sharma**
		***10:30-10:45***	***Coffee Break***	
	Venue: Macau	***10:45-11:25***	**Keynote Speech Ⅲ**	**Prof. Chen-Huei Chou**
		11:25-11:55	**Plenary Speech**	**Prof. Jiangping Wang**
July 30 12:00-13:10	***Lunch @ Hotel restaurant***			
July 30 13:10-19:00	**Venue: Macau**	***13:10-16:00***	**Session I**	**13 papers**
		***16:00-16:10***	***Coffee Break***	
	Venue: Macau	***16:10-19:00***	**Session Ⅱ**	**13 papers**
	Venue: Hong Kong	***13:10-16:00***	**Session Ⅲ**	**13 papers**
		***16:00-16:10***	***Coffee Break***	
	Venue: Hong Kong	***16:10-19:00***	**Session Ⅳ**	**13 papers**
July 30 19:30-20:30	***Dinner @ Hotel restaurant***			

Keynote Speakers

Prof. Chen-Huei Chou
College of Charleston, SC, USA

Chen-Huei Chou received the B.S. in Information and Computer Engineering from Chung Yuan Christian University, Taiwan in 1996, the M.S. in Computer Science and Information Engineering from National Cheng Kung University, Taiwan in 1998, the M.B.A. from the University of Illinois at Chicago, Chicago, Illinois, USA in 2004, and the Ph.D. in Management Information Systems from the University of Wisconsin-Milwaukee, Wisconsin, USA in 2008.
He is an Associate Professor of Management Information Systems and Decision Sciences in the School of Business at the College of Charleston, South Carolina, USA. His research has been published in MIS journals and major conference proceedings, including Journal of Association for Information Systems, Decision Support Systems, IEEE Transactions on Systems, Man, and Cybernetics, and Journal of Information Systems and e-Business Management. His areas of interests include web design issues in disaster management, ontology development, and data mining.

Prof. Liansheng Tan
Department of Computer Science, Central China Normal University, China

Liansheng Tan is a Professor at Department of Computer Science in Central China Normal University. Dr. Tan received his PhD degree from Loughborough University in the UK in 1999. He was a research fellow in Research School of Information Sciences and Engineering, The Australian National University,

Australia from 2006 till 2009, and a postdoctoral research fellow in 2001 in School of Information Technology and Engineering at University of Ottawa, Canada.
He has held a number of visiting research positions at Loughborough University, University of Tsukuba, City University of Hong Kong and University of Melbourne. Dr. Liansheng Tan is currently an Editor of International Journal of Computer Networks and Communications. He was an Editor of Dynamics of Continuous, Discrete & Impulsive Systems (Series B: Applications & Algorithms) (2006-2008), and an Editor of International Journal of Communication Systems. He has published over 120 referred papers widely in international journals and conferences. His research interests include modeling, congestion control analysis and performance evaluation of computer communication networks, resource allocation and management of wireless and wire-line networks and routing and transmission control protocols.

Prof. D P Sharma
AMIT, AMU MOEFDRE under UNDP & Faculty Ambassador (AI) under IBM's Cloud Computing Offering –USA

Confluence of the three, an eminent Academician, Researcher and a Dynamic Expert in Rehabilitation Technologies, Professor (Dr) Durga Prasad Sharma [Prof. DP Sharma] has remarkable contributions in Technical Education and Research. Prof. Sharma holds MCA, M.Tech and Ph.D. degrees in Computer Science and IT and global Certifications like DB2 and WSAD from IBM USA. He is recipient of over 43 Awards, numerous Honors and wide range Appreciations for his exceptional academic, research and social contributions. He is recipient of Red & White Bravery National Award (Medal) for Social Courage. He has been honored with "First Rank National Award "by the Civil Services Chronicle for creative writing at national level contest in India. He is recipient of five IBM-USA Awards in institutional capacity for playing a leading role in his Institution [2005, 2006, 2007, 2008, 2009, and 2010]. He is currently active researcher of Big Data Analytics and Intelligent systems over Cloud, and leading several interdisciplinary and collaborative projects with well-known organizations including Amazon and IBM. He has also authored 22 Books /

Titles on numerous themes of Computer Science and Information Technology for the government and private University Publications in India and abroad. Prof. Sharma has traveled several countries like Singapore, Canada, Germany, France, Egypt, Yemen, Ethiopia, Dubai, Malaysia and USA for his general and academic assignments. He has guided PhD scholars from University of Maryland-USA, Fiji National University- Fiji, Bahardar University- Ethiopia, SGVU and IIS University-India. He has authored over 117 referred Research papers/ Articles pertaining to research, innovation and current issues in technology, governance and rehabilitation in leading international journals, magazines and e-portals.

Prof Sharma is Fellow, IACSIT China. He has served to the Editorial Boards of 22 leading International Journals in Computer Science, IT and Multidisciplinary Informatics from The Netherlands, Egypt, France, Germany, China, Dubai, Canada, Singapore, Malaysia, Ethiopia and India in Computer Science, IT and Cross-disciplinary Informatics. He has also served as Member, Advisory Boards in more than 100 International Conferences organized in USA, Ethiopia, Canada, Egypt, India, China, Korea, Singapore, Malaysia and Taiwan. He possesses several positions (i.e. Conference Chair, Programme Committee Chair, Technical Advisor, Session Chair, Organizing Secretary and Editor in more than 100 International Conferences organized jointly by IEEE, SCIEI-USA, IETE, ISTE, SCIEI & SIE-Singapore, IACSIT-China, TTP Inc. Switzerland and Springer. He has delivered Keynote Speeches, Invited talks, Plenary lectures and presented his research in 7 countries. Apart from his Professional career, Dr. Sharma has been associated with several National and International organizations like Member, SCIEI-USA, Senior Member/Member, SIE-Singapore, ISOC-USA, IACSIT-China, SDIWC-USA, UACEE- Australia, The ResearchGATE-USA, ResearchSEA-UK, COC-CS University of Rajasthan-Jaipur-India, BOS–CSA, RTU-Kota-India, BOS-CSA, University of Kota- India, COC-CS&IT, VMO University- Kota-India, Coordinator, CIDC Govt. of India and Volunteer- UNVP etc. Dr. Sharma holds a mission to create a community of sensible researchers/scholars in Science and Technology for inspiring judicious growth, continuity and a meaningful transformation of multilateral growth of the society, individuals at nation and International Levels.

Plenary Speaker

Prof. Jiangping Wang
Walker School of Business and Technology, Webster University

Jiangping Wang is an associate professor of computer science at Webster University. He has a B.A. from Chongqing University, Chongqing, China, and an M.S. from the University of Leeds, Leeds, United Kingdom and a Ph.D. from the Missouri University of Science and Technology, Rolla, Missouri, USA. Dr. Wang's areas of teaching include database design, database applications, data warehousing, web databases, database in web services, and distributed application development. His areas of research include database management systems, decision support systems, business intelligence, e-commerce data processing, and software project management.

Schedule of Sessions

Keynote Speeches

Location: Macau Room

Opening Remarks 9:00-9:10	 **Opening Remarks** ***Prof. Chen-Huei Chou*** **College of Charleston, SC, USA**
Keynote Speech I 9:10-9:50	 **Title: LMS-Based Data Processing Approaches in Power-limited Wireless Sensor Networks: Accuracy and Efficiency** ***Prof. Liansheng Tan*** **Department of Computer Science, Central China Normal University, China** **Abstract**— In wireless sensor networks (WSNs), due to the restriction of scarce energy, it remains an open challenge how to schedule the data communications between the sensor nodes and the sink to reduce power usage with the aim of maximizing the network lifetime. This talk presents a tutorial on the state-of-the-art research progress to face this challenge, in the approaches of using the Least-Mean-Square (HLMS) adaptive filter. We discuss the working mechanism of LMS-based approaches in the purpose of data reduction in WSNs, analyze the mean-squared error, and design the interactive LMS prediction algorithm that is implemented at sink and sensor node and the resulted transmission protocol between them. To elaborate on theoretical proposals, the algorithms and protocols are then evaluated by simulation results. Challenges and problems are finally outlined as the future research directions.

Keynote Speech II 9:50-10:30

Title: Readiness for Green Convergence in Computing, Communication and Collaboration over Networks

Prof. D P Sharma

AMIT, AMU MOEFDRE under UNDP & Faculty Ambassador (AI) under IBM's Cloud Computing Offering –USA

Abstract— In response to demand, convergence has been evolving on the Internet ever since its inception. Now more than ever, your capacity to enable effective, real-time computing, communication and collaboration can be the key to gaining competitive advantage in a fierce marketplace. In today's dynamic business environment, organization's agility, productivity and operational efficiency depends on a unified approach to communications, computation and collaboration. Communication convergence over network for computation and collaboration is the efficient coexistence of telephone, video and data communication within a single network. The use of multiple communication modes in a single network offers convenience and flexibility not possible with separate infrastructures. This talk will start from an answer to how and why convergence has become the most important dynamic enabler? Further it will highlight its essence in communication, computation and collaborations. It will focus on some of the most important ignorant factors in the project and research domains and finally conclude with research orientation over new and innovative ideas of readiness for green convergence using tri state model.

Coffee Break & Group Photo
10:30-10:45

Keynote Speech Ⅲ 10:45-11:25	 **Title: Modern Internet Abuse Detection** ***Prof. Chen-Huei Chou*** **College of Charleston, SC, USA** **Abstract**— As the use of the Internet in organizations continues to grow, so does Internet abuse in the workplace. Internet abuse activities by employees—such as online chatting, gaming, investing, shopping, illegal downloading, pornography, and cybersex—and online crimes are inflicting severe costs to organizations in terms of productivity losses, resource wasting, security risks, and legal liabilities. Organizations have started to fight back via Internet usage policies, management training, and monitoring. Internet filtering software products are finding an increasing number of adoptions in organizations. These products mainly rely on blacklists, whitelists, and keyword/profile matching. In this talk, I would like to share a text mining approach to Internet abuse detection. I have empirically compared a variety of term weighting, feature selection, and classification techniques for Internet abuse detection in the workplace of software programmers. The experimental results are very promising; they demonstrate that the text mining approach would effectively complement the existing Internet filtering techniques. In this speech, I would like to share my knowledge and experience in conducting text mining approach for detecting Internet abuse in the workplace.
Plenary Speech 11:25-11:55	 **Title: Big Data and Its Impact on Data Management** ***Prof. Jiangping Wang*** **Walker School of Business and Technology, Webster University** **Abstract**— The term Big Data is getting popular today. We hear it more and more often, from big data era, big data technology, big data analytics, to data science. Big data is energizing organizations across industries and it drives

	business towards the direction of more data consciousness. Big data brings new opportunities in data analytics and data processing. At the same time, it presents challenges in many areas of data management. Essentially it signifies a paradigm shift and will demand advancement in data management. This presentation discusses the definition of big data, its sources inside and outside an organization, big data challenges on data management, and the trends along with its expansion.

Lunch @ Hotel Restaurant
12:00-13:10

Session I Network teaching and learning mode
13:10-16:00

Session Chair: Dr. Yuejin Xu

Murray State University, Murray, KY, U.S.A

T501	Evaluating Social Learning in a Virtual Environment via Concept Maps **Xin Bai** and Joanne Lavin Teacher Education / Educational Technology York College of the City University of New York ***Abstract***—Concept maps are often used as media for constructive learning activities. We evaluated student social learning outcome in a virtual learning environment via concept maps. Nursing students first follow a case study of a stroke patient, whose diet and life style eventually resulted in a trip to emergency room for stroke diagnosis and treatment in the virtual hospital. They were then given a new scenario and got on a virtual trip in Second Life, a multiuser virtual environment (MUVE). They played the roles of a patient, a relative, a doctor, or a nurse, experiencing the emotional, physical, or social impacts those stakeholders may have gone through. Our study indicates concept mapping can be a unique and effective tool for measuring student social learning in a virtual environment.
T003	Undergraduates' Attitudes toward the Use of Facebook in Fundamental English Course **Piyada Low** and Rinda Warawudhi Kasetsart University Si Racha Campus, Thailand ***Abstract—*** English instructors in tertiary level in Thailand usually encounter with large classes with mixed-ability students in their classroom. Time constraints in the classroom also limit the activities to provide an opportunity for students to practice their lessons. Therefore, this paper attempts to investigate the use of Facebook as a learning tool outside the classroom for English classes. The subjects were 158 undergraduate students studying Foundation English I which is a compulsory general course for undergraduates at Kasetsart University Si Racha Campus in Chon Buri province, Thailand. The subjects were divided into two groups: 78 students majoring in engineering were in Group 1 and 80 students majoring in economics were in Group 2. The experiment started after formative test and it lasted seven weeks. Teachers posted questions twice a week and students allowed two weeks to do exercises. At the end of the courses, close-ended and open-ended questionnaires were distributed to students. The results showed that Facebook may be used as a learning tool outside English classroom. It could help promote motivation and attitudes to learn English as well as it can encourage the interaction

	between teachers and students.
T206	Mobile Phone Use at School as an Element of Hidden Curriculum: M-Hidden Curriculum **Burhan AKPINAR,** Veli BATDI, Bilal YILDIRIM, Aysenur KULOGLU, & Ender ÖZEREN Firat University, Turkey ***Abstract*—** Mobile phone is a new educational phenomenon that can be related with students' health, academic and social development. There a number of studies in literature on this subject. However, there aren't any studies on the relation of mobile phone with informal processes at school. Mobile phone is a new phenomenon which builds school culture with informal ways or reproduces the existing culture. The relation of this element with the hidden curriculum at school is disputable. The aim of this study is to determine the views of high school students in Turkey on the reasons of their mobile phone use in the context of hidden curriculum and evaluate those views in terms of different variables. The study was carried out on 289 students enrolled at state schools in the cities of Elazığ and Malatya in 2013-2014 educational year. The data obtained via a questionnaire form were analysed using SPSS package program. As a result of the analysis, it was determined that most of the high school students in Turkey have mobile phones and they bring them into classes although it is banned by the regulations. Students prefer to use mobile phones to communicate, listen to music, share announcements, send text messages, take photos, and connect to social networks and for educational purposes. These preferences are, in a sense, means of building a school culture or reproducing it, which is described as hidden curriculum. This case can be considered as the sign of a new hidden curriculum, being built by mobile phones informally. This curriculum can be named as m-hidden curriculum or e-hidden curriculum.
T209	Inquiry-based Learning of Astronomy with WorldWide Telescope **Qin Wang,** Cuilan Qiao and Xiaoping Zheng Central China Normal University ***Abstract*—**WorldWide Telescope (WWT) is a free software program, which brings scientific astronomy data, images, stories and other information together. It functions as a virtual observatory on computer. With many outstanding features, WWT comes to be potentially powerful technological tool that supports inquiry-based learning goals in astronomy education. The practice of WWT based teaching about astronomy has been implemented in an elective course at the Central China Normal University since 2011. Four essential steps in this implementation have been described in detail. Results from the teacher's feedback and the survey which 137 students filled out after the course are presented in this paper. We expect that more teachers and students could benefit from this method when teaching and learning astronomy in the future.

T213	Cross Cultural Similarities in Using Mobile Technologies to Engage and Connect with Students **Shaun S. Nykvist**, Michelle M. Mukherjee and Lieu Tran Queensland University of Technology, Australia ***Abstract***—The access to mobile technologies is growing at an exponential rate in developed and developing countries, with some developing countries surpassing developed countries in terms of device ownership. It is both the demand for, and high usage of mobile technologies that have driven new and emerging pedagogical practices in higher education. These technologies have also exponentially increased access to information in a knowledge economy. While differences are often drawn between developing and developed countries in terms of the access and use of information and communication technologies (ICT), this paper will report on a study detailing how higher education students use mobile technologies and social media in their studies and in their personal lives. It will contrast the similarities in how students from an Australian and Vietnamese university access and use mobile and social media technologies while also highlighting ways in which these technologies can be embraced by academics to connect and engage with students.
T302	Global Citizenship Perceptions of Students in Different Cultures Zafer Çakmak, **Birol Bulut**, Cengiz Taskiran Firat University /Faculty of Education, Department of Social Studies Education, Elazig, Turkey Abstract— Currently it's possible to reach any knowledge fast and immediately with the technological developments of the modern world; new global economies are shaped with economic developments; each social system undergoes changes with social innovations to compose new social interactions, and new modes of communication. Civil insights aren't on the previous locations, anda re in a change and development process. Thus, a new concept, insight, and fields of citizenship flourishes which has been based on new forms of belonging, new rights, and responsibilty sets,and has started a proper sector related with discussing new alternate concepts like European Citizenship, Cultural Citizenship, Global Citizenship, Digital Citizenship. We've focused in our study on the concept " Global Citizenship", and the " Global Citizenship Perception Scale" which was developed by Clarisse Olivieri Lima [7] was used applied and examined. The study was conducted on 72 foreign students in Turkey attending several departments in Fırat University in 2014-spring semester to determine their "Global Citizenship Perceptions." The distribution of findings based on gender, fluency in a foreign language, Internet use frequency and purpose were analyzed. In data analysis, t-test and ANOVA analysis were utilized in the study. Analysis of data was conducted using SPSS 17.0 program in the study.

T402	Motivation in E-learning: How do we keep learners motivated in an e-learning environment? **Professor M. Samir Abou El-Seoud**, Mahmoud M. El-Khouly and Islam A.T.F. Taj-Eddin British University in Egypt (BUE)/Faculty of Informatics and Computer Science, Cairo, Egypt ***Abstract*—** E-learning provides students with a different opportunity to learn regardless of where they are and when they are available. In e-learning environment, students are able to participate in self-faced and interactive learning that is otherwise impossible. This paper shows that the use of interactive features of e-learning increases the motivation of undergraduate students for the learning process. Internet technologies provide integrated environment for web-based learning tools to support e-learning education. Motivation is a corner stone in online distance learning. Together with the flexible and effect interaction between teachers and learners enhance the learning outcomes. This paper gives a preliminary study of the relationship between interactive features of e-learning and the motivation of undergraduate students for the sake of learning process.
T404	Emotion Based LMS: An Investigation of User Perceptions and Attitudes **Teoh, Kung-Keat** and Lau, Siong Hoe Flinders University, Australia ***Abstract*—**This study offers a comprehensive review of various methodologies for emotion based emotion learning management systems (LMS) and examines the use of Technology Acceptance Model (TAM) to investigate how learner beliefs and attitudes influence emotion based LMS use among higher education learners by evaluating the relationships between perceived usefulness, perceived ease of use, attitude and behavioural intentions. In the study, 40 potential users were presented with an introductory demonstration of emotion based LMS for an IT course. Following the demonstration, data on user perceptions and attitudes about emotion based LMS were gathered based on this initial exposure. Hierarchical multiple regressions were used to assess the overall model and influence of each variable of interest in determining behavioural intentions to use emotion based LMS. The analysis showed that both the user perceptions and attitudes have significant positive effects on behavioural intention to use emotion based LMS. Implications of these findings for practice and research are examined and discussed.
T405	ClasSense: A Mobile Digital Backchannel System for Monitoring Class Morale **Peerumporn Jiranantanagorn**, Haifeng Shen and Robert Goodwin Kung-Keat Teoh Flinders University, Australia

	***Abstract*—** Digital backchannel systems have been proven useful for lecturers to gather real-time online feedback from students in a large lecture environment. Nevertheless, the fast pace of a lecture relative to a large audience can make it difficult for the lecturer to process and respond to large amount of feedback in real time. To address this issue, we propose a mobile digital backchannel system ClasSense that allows students to express their emotions during a class and analyses the sentiments of their feedback in real time so that the lecturer can continuously monitor the morale of the student population and respond to the most important concerns students have in common. This paper presents the key design considerations and a pilot study of the proposed system.
T406	The Development and Evaluation of Photography Memory Training through Internet eLearning System **Dr.Tan Yong Kok**, Lih-Shyang Chen and Irene Wenling Chen Asia University, Taiwan ***Abstract*—**In this research a Persistence of Vision Mnemonics training (PVMT) technique is proposed, that trains students in developing Photography Memory, to overwhelm the previous research which concluded that this phenomenon are indeed rare and that such ability is usually innate.. A memory training digital learning system and platform was developed, to train student through internet. To evaluate the performance of this program and PVMT technique, two experiments were conducted: a pilot study experiment and a final experiment. The pilot study experiment was used to evaluate the performance of the platform, while the final experiment evaluated the effectiveness of PVMT technique in memory training. The result of this experiment proved that 19 out of 38 was succeed, in memorize of 12 items, in the post-test (after the PVMT technique training), which result exceeded the limitation of human being (9 items memory limitation). Furthermore, 4 of the trained student succeeded in memorizing the 16 items. Besides that, the students whose achieved the task (post-test) took less time than in the pre-test.
T410	Study on the Use and Impact of Online Social Networking in Egypt **Prof. Mahmoud M. El-Khouly** Faculty of Computers & Information, Helwan University, Egypt ***Abstract*--** Joining social networking sites is mostly selective and motivated by self-awareness of the individual's. After joining a social networking site, members are constantly evaluating the value of their membership and building their own perceptions towards the benefit and cost of being members in these networks. This paper strives to monitor the most important impact of using social networking sites in Egypt. Its intention is to offer analytical avenues for intellectual examination of what has clearly become of the most powerful and important socio-political phenomena of Egyptian society.

T411	Remote Interactive Digital Transmission Classroom Based on IP Net **Bei Cheng** and Zitao Zhu Anhui Electrical Engineering Professional Technique College ***Abstract*—**Adapting to the demand by the Ministry of education to strengthen specialty construction in higher vocational schools, the paper elaborates on the importance and construction scheme of remote digital transmission class, discusses the key technology. The scheme can make the part-time teachers in enterprises directly teach professional lesson in his work site. The scheme plays an important role to improve the quality of teaching and bring out school-enterprise cooperation. Taking the example of productive process automation specialty construction supporting by central finance in national key college (Anhui Electrical Engineering Professional Technique College), it details the design and construction process of Remote Interactive Digital Transmission Classroom. Application cases show that, this mode is useful for reference to other high schools.
T010	Contributions of Student Response System on Learning in Hong Kong **Wenjie WANG**, Anson WONG, Shaolong TANG, Anthony NG The Hong Kong Polytechnic University ***Abstract*--**We analyze the effectiveness of one of the most popular innovative technologies "student response system (Clickers)" in Hong Kong using a sample of over 500 undergraduate students. Specifically, we analyze the impact of this system on academic results of these students by comparing results when the system is applied to a test group versus a control group. We find that this innovative teaching method in general assists students' learning outcome. Addition tests show that a major determinant of effectiveness of this system is nationality of students. Furthermore, female students perform better when exposed to this system. We recommend that lecturers should utilize such system in large lectures to ensure students understand the presented materials.

Coffee Break & Group Photo
16:00-16:10

Session Ⅱ - Advanced education technology
16:10-19:00
Session Chair: Dr. Shaun S. Nykvist
Queensland University of Technology, Australia

T503	Learners' Evaluation of the Usability and Design Features of Chinese as a Foreign Language E-Learning Websites **Yoon Fah Chuah**, Fong Lian Foo, and Zulkifly Mohd Zaki Academy of Language Studies, Universiti Teknologi MARA (Perak), Perak 31260 Malaysia ***Abstract*** **—**Given the dearth of research that explains phenomena related to usability and design issues affecting Chinese as a Foreign Language (CFL) e-learning websites, this study was launched, using a modified questionnaire, to explore answers for the following three research questions: 1) Do the learners use CFL e-learning websites to learn Chinese language? 2) To what degree CFL e-learning websites are usable from the perspective of the learners? 3) What do the learners think of the design features of CFL e-learning websites? Thirty nine undergraduate students studying Level II of the CFL course at a Malaysian university where this study was launched responded to the questionnaire, out of which twenty two (56.4%) of them indicated that they used the existing CFL e-learning websites as a means to support their learning of the language. In addition, though the majority of this group of respondents ranked highly the usability aspect of the websites they used to learn the language, a small number of repondents expressed views over the design issues of the websites via the focus group interview conducted. This study envisages that the findings derived thereof will contribute towards providing instructors and course designers with a better understanding of relevant aspects causal to usability and design of CFL e-learning websites thereby enabling them to make informed decisions about future CFL e-learning website design and development.
T211	Technology Usage in School Management: Electronic School **Dr. Çetin TAN** Siirt University, Turkey ***Abstract--*** The school management, which means the use of electronic teaching process technology, requires technological leadership qualities. Effectiveness and efficiency of the electronic schools, which is run by the technological leader, is high. The purpose of this research is to determine the opinions of teachers on the use of technology in school management, and, relying on these opinions, to discuss the electronic school concept. The study was carried out in Elazig with 123 teachers in 2014-2015 education year. The data obtained by the questionnaire were analyzed using the SPSS software. At the end of the analysis, it was determined that

	teachers who are affected directly by management have positive attitude towards electronic school. According to the teachers, use of technology provides support for order, management planning, project development and decision-making process. While teachers think that school administrators are sufficient enough in electronic school, they think that it leads to the feeling of being under control. In conclusion, it reflects Turkey with some delay and deficiencies. This case is important in terms of the Turkey's official aim of being information community.
T002	Enriching Science Learning through Simulations and Interdisciplinary Problem-solving **Dr. Yuejin Xu** Murray State University, Murray, KY, U.S.A **Abstract--** This session is to share some activities in a professional development for empowering teachers to engage students with science simulations and interdisciplinary problem-solving activities. In addition, this session will examine and discuss the impact of this professional development on teachers' understanding of the Common Core State Standards for Mathematics and the Next Generation Science Standards.
T004	Study on Ecological Context and Eco-compensation Mechanism of Basic Education Informatization in Northwest Minority Areas Minjun Cai, **Yali Hu**, Xiaotao Li and Haoyin Lv The Northwest Normal University, Lanzhou, China ***Abstract*—** In the education informatization ecosystem, the ecological development of elementary education informatization in northwestern China is extremely uneven. Besides, this problem has seriously affected the coordination and balance of the education informatization ecosystem's hierarchy and regional structures in China. Therefore this research firstly tries to analyze the realistic context and development characteristics of the education informatization in Northwest minority areas in hope of putting forward a corresponding compensation mechanism for this. And secondly manages to improve the energy and power of the elementary education ecological system in Northwest minority areas, then finally to promote the development of our country's elementary education informatization ecosystem in a balanced way.
T005	Application Research of "Micro Lecture" Based on "Shadow Teaching" Minjun Cai**, Doudou Li**, Xiaotao Li The Northwest Normal University, Lanzhou, China ***Abstract*—**Based on the design concept of "shadow teaching", the teacher can on the one hand apply "micro lecture" into the classroom teaching, and on the other hand substitute or supply teachers' concentrated teaching method with micro-video

	resources. In this way, teachers become students' learning guiders and collaborators. The paper adopts the development ideas of turning a big class to "micro lecture" based on the application of the junior middle school physics to make the "shadow teaching " be well implemented in classroom.
T106	The Evaluation of Edmodo in Business Reading Class **Ms Rinda Warawudhi** Department of Western Languages, Faculty of Humanities and Social Sciences, Burapha University, Chon Buri, Thailand ***Abstract*—** Several social media have been adopted in the digital 21st-century classroom. Edmodo is one of free social media providing opportunities for students to practice their lessons outside the classroom. In addition, the management of a reading class usually encounters with a large size class and the limited teaching time. The use of e-learning system or Moodle was suggested at Burapha University. However, the university server may not be able to serve large amount of users. This study, therefore, evaluates the use of Edmodo whether it can be equivalent to the use of university Moodle. The subjects were 54 undergraduate students studying Reading in Business English in the academic year 2014. They were divided into 11 sub-groups for their group presentations and other online quizzes. Online observation was used to study the use of Edmodo during the semester whereas close-ended and open-ended questionnaires were distributed at the end of the class to find students' attitudes toward the use of Edmodo as the learning tool in reading class. The findings reveal that students report positive attitudes toward Edmodo in terms of users friendly function and interaction between students and teacher. Hence, the study suggests that teachers may consider the use of Edmodo in their reading class.
T207	M-Learning in Art-Education **Ms Yelda Usal** and Atilla Şirin Fırat Universty, Turkey ***Abstract*—** M-Learning, referring to the use of mobile (or smart) phones, computers, and internet in teaching-learning process, have also had a broad repercussion in art education in Turkey. Because, especially in higher education, the use of these technologies is very common. What imposes the use of mobile technology is that these technologies offer significant opportunities for art education and the potential to provide alternative perspectives. However, the use of mobile technologies in art education depends, above all, on students' perception, awareness, and views on this subject. The goal of this research is to determine the views of candidate teachers at İnönü and Fırat Universities in 2014-2015 academic year on the use of mobile technologies in art education. The research was conducted on 148 teachers. The

	data were obtained through Likert-type questionnaire. To analyze the data, descriptive statistical techniques were utilized. The findings showed that candidate teachers use internet and mobile (or smart) phones to access information and to research, and that they find them useful for academic achievement and creativity. However, students are not fully aware of the opportunities offered by mobile technologies for art education. They, under the influence of traditional understanding, perceive mobile technologies as a tool rather than as a source or setting. Their awareness in M-Learning is low, and they are not aware of transformation in the form of transition to positivism beyond paradigms taking place on a global scale in education. This case brings into disrepute Turkey's "information society" goal in art education
T208	Transformation in Art Education: Internet **İsmail Aytaç** and Abdulmecit Adam Fırat Universty，Turkey ***Abstract*—**The internet, which was introduced at the end of 20th century, has affected art education as in many other fields. The virtual life which has been introduced with internet has changed the habits of students who are accustomed to face to face education and teachers who conduct that type of education. This change includes not only training process but also curriculum, education atmosphere, classroom and school management. Art education in Turkey is on the junction; whether it is going to adopt these changes or it will be just observer of this transformation. The aim of this study is to determine the opinion of students about the role of internet on transformation of the art education and to evaluate these opinions according to some variation. The study was conducted on 4th grade students who study at Mustafa Kemal, Fırat and İnönü Universities. Descriptive method was used in this study and these findings have been obtained: Although teacher candidates use the internet very often, their awareness about this subject is very low. The students who have traditional art view perceive the art education mechanical. Therefore, it can be said that students are not aware of the opportunities which are provided by internet. This is a major problem about not taking advantage of internet technology in art education in Turkey.
T210	The Frequency of Unwanted Student Behaviours in Secondary Schools in Terms of Certain Variables **Assoc. Prof. Dr. Faysal ÖZDAŞ**, Prof. Dr. Burhan AKPINAR Mardin Artuklu Üniversity, Turkey ***Abstract*—**Unwanted student behaviours are considered to be the biggest obstacle at schools for education to reach its goals. This case may threaten the goals and the safety of schools, and make classroom management difficult. The aim of this study is to examine the frequency of unwanted students behaviours in terms of some personal variables of teachers. The sample of the study consists of 316 secondary school teachers who worked in Batman central district in 2013. As a data collection

	tool, "Frequency Scale of Unwanted Student Behaviours", which was developed by [7]. was utilized. The data were analyzed by using SPSS for Windows 18.0. According to the analysis results, considering the gender, there is difference between teachers' views on regarding the frequency of unwanted student behaviours in the dimension of " out-of-class behaviours". This difference is in female teachers favour. When compared to male teachers, female teachers indicates more that unwanted student behaviours occur. Considering the socio-economic variable, there is significant difference between upper-level and lower-level, and medium-level and lower-level in the dimensions of "interpersonal relationship" and "out-of-class behaviours". This difference is in the favour of lower-level in both dimensions. As for the "interpersonal relationship", there is difference between upper-level and lower-level in this dimension. Again, the difference is in the favour of lower-level.
T212	Analysis on the Relationship Between the Attitude of Teacher Candidates Towards Teaching Profession and the Perception of ICT Self-Efficacy **Ms Vildan DONMUŞ**, Burhan AKPINAR, Mehmet EROĞLU Fırat Universty，Turkey ***Abstract*--**The purpose of this study is to analyze the relationship between the attitude of teacher candidates towards teaching as profession and the perception of self-sufficiency on information technologies. The study was designed with casual comparison of the quantitative research methods. The sample was selected by using appropriate sampling of non-random sampling method. 280 teacher candidates who study at Firat University Faculty of Education in their final year participated in this study. Data was collected in the second half of 2014- 2015 academic year through Information Technology Self-Efficacy Scale (Ekici, Taşkın Ekici and Kara, 2012) and Teacher Attitudes Scale (Üstüner, 2006). According to the findings obtained in the study of teachers' attitudes towards the teaching profession and information technology seems to be at high level. In the study the attitudes of female teachers' attitudes towards the teaching profession was statistically significantly higher than male teachers. Male teachers' information technology self-efficacy perceptions were statistically higher than female teacher candidates' perceptions. Candidates' attitudes towards teaching profession stating that they came willingly to the department are statistically higher than the candidates stating that they studied unwillingly at that department. But it was found that the students who come willingly to their department have no statistical effect on information technology self-efficacy perceptions. Teacher candidates' attitudes towards the teaching profession and information technologies differ from each other according to the department they study. Teachers' attitudes towards teaching profession can be seen through the candidate's level of information technology self-efficacy perception.
T215	The Technological Addiction in Children A Qualitative Research **Assist. Prof. Dr. Burcu Gezer Şen**

	Fırat Universty, Turkey ***Abstract*--**We are living in a world where there is a lot technology around us. In today's community structure, the children make use of the technology since early ages. The aim of this study is to determine to what extent the technology is in children's lives. In this sense, the sample of this study consists of 30 children between 10-18 ages in Elazığ in March 2015. The reason of this is the case that they use the technology more intensively. In the study, semi-structured interview technique, which is of qualitative data collection tools, was utilized. The data obtained were analyzed through content analysis technique. As a result of the study, it was seen that the children have similar attitudes regarding the use of technology, and that the technology, especially the internet and mobile phones, have a say in children's life.
T301	The Target System of Bilingual Education in Finance and Economics Curriculum **Li. Zhou** School of Economics and Management, Zhaoqing University City Zhaoqing, Guangdong Province, China ***Abstract***—Chinese enterprises are confronted with the problems of insufficient talents in their global business management and operations, since the talents training lags behind the step of the economical internationalization. The bilingual education in finance and economics curriculum is an efficient reform to adapt the new development tendency and impels the process of internationalization in Chinese enterprises. The target system of bilingual education in finance and economics curriculum covers three aspects, namely curriculum target system, ability target system, and comprehensive target system, in which some factors such as the school-running orientation, the organization form, the training and construction of bilingual teaching team, the bilingual study environment and so on are required to work coordinately.
T413	Listening to the voice of dyslexic students at a small, vocational Higher Education Institution to promote successful inclusive practice in the 21st Century **Deena M. Webster** Harper Adams University, Newport, UK ***Abstract*** — Vocational University has 20% of the student population with a specific learning difficulty. The UK Government will cut the Disabled Students' Allowance by 70% targeting students with learning disabilities. Attending higher education may become unviable due to the removal of financial support. This paper aims to investigate difficulties that students encounter utilising a dyslexic student survey. 43 questionnaires were collected and analysed using Pearson's Correlation, Chi-square and determining key themes in open questions. Results show dyslexic students need to read more for pleasure to increase their lexicography and topic understanding. Higher education institutions need to implement strategies to

	empower students and lecturers to be aware of learning styles. Staff need to reduce the speed of delivery of lectures and be more approachable to students. Examinations should be reduced and course-work increased to be more inclusive. A lecturer/support staff/student feedback loop should be implemented to further improve inclusivity. Further research should be undertaken with a larger student sample and include lecturers' perspectives on learning difficulties.

Dinner @ Hotel Restaurant
19:30-20:30

SessionⅢ Knowledge engineering and social media
13:10-16:00
Session Chair: Prof. Jiangping Wang
Webster University-United States

IKM003	Data Warehouse Snowflake Design and Performance Considerations in Business Analytics **Jiangping Wang** and Janet L. Kourik Webster University-United States ***Abstract*—**Snowflake is a data warehouse schema design where dimension tables are normalized on top of a star schema design. Snowflake schema is generally not recommended due to its performance overhead in joining the normalized dimension tables. However, the Snowflake schema can be extended in a way to improve performance for business analysis activities. In business analytics paradigm, two distinct environments are complementary and work together to provide effective business analytics. Firstly, the data warehouse environment transforms operational data into information. Secondly, the analytical environment delivers information to end users for further data analysis and decision making. The snowflake schema bridges the gap between the two environments. Snowflake schema facilitates the mapping of wide dimension structures with many dimension attributes to analytical processing hierarchies. The snowflake schema makes navigation along hierarchies easier and supports flexible analysis such as drilldown and rollup. This paper examines the two complementary business intelligence environments, roles played by the snowflake design in mapping from data warehouse to analytics, and performance considerations in snowflake design with case studies.
T303	A Study on the Inquiry Skills of Social Studies Teacher Candidates Assoc. Prof. Dr. Zafer Çakmak, **Res. Asst. Cengiz Taşkıran** and Res. Asst. Birol Bulut Firat University /Faculty of Education, Department of Social Studies Education, Elazig, Turkey ***Abstract*—** The objective of this study is to determine the views of social studies teacher candidates on inquiry skills. "Inquiry Skills Scale" developed by Karademir, Ç.A. and Saracaloğlu, A. S. containing 14 items was applied to the participants to determine their views on inquiry skills. The study was conducted in the fall semester of 2014-2015 academic year. The sample of the study consisted of 174 students attending Elazig Firat University, Faculty of Education, Department of Social Studies Teaching. The surveys distributed to the students were then collected and analyzed. In the analysis of the collected data via the survey forms to determine the views of

	pre-service teachers on inquiry skills independent t-test and one-way variance analysis (ANOVA) were utilized. For the analysis, gender, class, academic GPA, mother's and father's educational background of the social studies pre-service teachers were assigned as independent variables. Results of the analysis demonstrated that there was a statistically significant difference between the inquiry skills of social studies teacher candidates based on gender, class and academic grade points average, while there was no evidence of a significant difference based on mother's educational background and father's educational background.
IKM005	Instance Analysis of QQ Group Chat Record Based on Social Network Analysis Method **Yuchen Shen**, Zhu Gao, Junhui Gao Big Bridge Academy/Software Engineering Institute East China Normal University /Shanghai Center for Bioinformation Technology-China ***Abstract*—**This paper uses social network analysis to analyze the QQ group "Harry Potter—Hogwarts"s chat record. It utilizes the software Netdraw to create a specified number of community structure, and adopts the Girvan-Newman algorithm to calculate the modules of different numbers of communities, thus deriving parameters such as the Degree, Eccentricity, Closeness, Betweeness,etc. of community central members in the QQ group. The results are generally compatible with the actual data.
IKM007	Deriving Complex Periodic Patterns from Nested Logs of Events **Janusz R. Getta** and Marcin Zimniak School of Computer Science and Software Engineering, University Of Wollongong, NSW-Australia ***Abstract*—**Periodic processing of software components is a simple reflection of a periodic nature of many real world processes where the identical actions are repeated at every given period of time. Discovering periodic patterns in the traces of computations performed in the past allows for better preparation of software systems to meet the demands of high workload times in the future. This work shows how to discover the periodic patterns in the nested logs of computations using the transformations of the simple patterns into the complex ones. The paper defines a concept of periodic pattern and its validation in a reduced nested log of events. A system of derivations rules is defined and followed by a sequence of algorithms that use the rules to create the complex periodic patterns. The paper is concluded with a description of experiment where the sequences SQL statement are transformed into the expressions of extended relational algebra and used as input data to discover the periodic patterns with a method described in the paper.

IKM011	Ontology Design for Thailand Travel Industry **Sanya Khruahong**, Xiaoying Kong and Doan Hoang University of Technology Sydney -Australia ***Abstract*—** Tourism industry plays a crucial role in the economics growth in countries of South East Asia and hence the demand for rich local tourist information for visitors. In these countries, there are unique deciding impact factors to visitor journey such as constraints in culture, laws, and festivals. Such special information has not been available or implemented in general search engines so far. In this paper, we design an ontology for Thai travel industry to support an intelligent finding of these local events and their constraints using semantic web. The primary contribution of this paper is a new approach to design ontology for Thailand travel industry on both general information and specific dynamic local information using Domain Ontology Graph (DOG) and location based services. As a result, this ontology design will be applied to an intelligent searching for making decision of tourists. This ontology design will be used in semantic tourism applications in the future.
IKM012	Analysis of Influence Organizational Culture toward Intellectual Capital **Augustina Asih Rumanti**, Trifenaus Prabu Hidayat, Yordy Atma Jaya Catholic University of Indonesia-Indonesia ***Abstract*—**Organizational culture commonly referred as work culture and is important in the SME (small and medium enterprises). If the organizational culture that is used in the SME is right and good then SME will go well. One of the assets owned by an SME is intellectual capital and it is an intangible asset that also plays an important role in an SME. This study wants to analyze the influence of organizational culture on the intellectual capital. This study conducted by case study on Bina Karya SME that is located in Yogyakarta, Central Java, which is engaged in the wood handicrafts and souvenirs. In this study, the structural models developed from the results of the elaboration using the related theories are used. This structural model then produced a questionnaire that is used as a measuring tool in the study. Organizational culture has seven variables and intellectual capital has three variables in the research model. Data processing was performed by using software Smart PLS 2. The results of this research show that organizational culture has an influence on the intellectual capital which means indirectly if the applied organizational culture is good and supportive in doing the work then it will increase the intellectual capital. From seven variables of organizational culture there are four variables influencing that is innovation and risk-taking, results orientation, team orientation, and aggressiveness while for all three variables of intellectual capital have effect that is human capital, structural capital and relational capital.

IKM017	Visual Interfaces Designed for Searching Text Content on Mobile Devices Todd Welch, Gregory Short, **Beomjin Kim** Indiana University-Purdue University-United States of America ***Abstract*—**The widespread availability of mobile devices has made information available to many on the go, making it a valuable tool in everyday life. Their ability to look up information on the fly and assist with a user's information retrieval in a timely fashion make them a natural everyday carry. However, a limitation of these devices is the lack of screen space available to display information, thus presenting a potential problem to this seemingly ideal device. A technique to present a large amount of information, cohesively, is required to make users' search activities more convenient and effective. We present visualization techniques designed for presenting lengthy text-based documents on mobile devices. The system uses two different visualizations, Overview and Detail. The Overview shows the overall profile of search terms in the document(s). The Detail View presents the requested information, clearly displaying to the user what content is available. By utilizing this two-step approach, we can assist users' search activities by making them more effective in their search concerning lengthy text contents. A pilot experiment was conducted to evaluate the effectiveness of these visual interfaces compared to a traditional text-based interface. For a majority of measured items, the testers showed a higher degree of satisfaction using the visualization, that was developed to address the difficulties in exploring text content on a small screen device. Although a larger scale usability test is expected in the near future, our initial study shows the feasibility of using multi-level visual interfaces as a search-supporting tool to review lengthy text documents on mobile devices.
IKM020	Emerging Data Services Viscosity to Enrich Pivotal Capabilities of Interactive Enterprises: Towards a Lean Integration Architecture Approach **Vikas S. Shah** Wipro Technologies, USA ***Abstract*—**Primary focus of the lean architecture approaches is the enterprise value stream. They offer techniques to grip the consumers at the early stages of the integration architecture (IA) such that every subsequent artifact complements to IA. In recent years, interactive enterprise (IE) centric architecture integrates data and business processes by placing or updating reusable as well as orchestrated services of IA. The practices in data warehouse development have become ubiquitous, especially, as the need for system interoperability has grown and expectation has been increased to address susceptibility in association with enterprise-grade interactivity. More enterprises desire to architect application programming interface (API) landscape that consents to consolidating and associating segregated logical data sets to aspects of a responsive IE. In this paper, we provided an approach to disseminate and classify the emerging data services (DSs) that formulates an IE. The methodology to update these DSs enables IE to attend diversified

	characteristics of API context and traceability to the aspects of business processes (BPs). The lean IA principles and corresponding architecture trade-offs are derived to update and introduce. We present standardization to consistently evaluate these DSs within the characteristics of IE reportable across an enterprise.
IKM302	KNOWLEDGE CREATION IN AN INTEGRATED PRODUCT-SERVICE **Anisa Mohd Yusoff** and Prof. Noor Azlinna Azizan University Malaysia Pahang ***Abstract*—** The paper is about the investigation of how new knowledge is created when customer knowledge captured during the use-phase and retirement stage, and firm internal knowledge in an integrated product-service development cycle. Customer knowledge is integrated with firm-internal knowledge and converted into new ideas or solutions through knowledge conversion process, as such enhance the customer value proposition in terms of product and service performance. The main contributions to the literature are threefold. First, we provide how customer knowledge captured from other product life cycle and firm-owned knowledge towards affect new knowledge creation in developing an integrated product-service design. Second, we provide evidence new knowledge creation in an integrated product-service design is crucial in enhancing customer value proposition in terms of product and service performance. Third, we offer knowledge creation process in an integrated product-service design as an important determinant for product-service performance.
IKM021	The literature of Crowdsourcing in China: Evidence from WeiChaiShi.com **Bei Wu**, Tingting Wu , QingShan NG Zhejiang Gongshang University, Zhejiang, China ***Abstract*—** As a typical emerging area, crowdsourcing is promoting the contact among the people, organization, society and cooperation. It has been more and more popular that crowdsourcing model is used to solve business problems and take advantage of market opportunities. In this paper, we first review the concept, feature, process of crowdsourcing. Then we distinguish crowdsourcing from outsourcing and point out crowdsourcing's function on companies. Third, we make deep analysis on Weichaishi's crowdsourcing platform in China from the perspective of the operating process, management mechanism and relationship among crowd and outsoucer. At last, we look forward the future study
IKM023	A Novel System for Document Classification Using Genetic Programming Saad M. Darwish, Adel A. EL-Zoghabi and **Doaa B. Ebaid** Department of Information Technology, University of Alexandria, Egypt Abstract—with the increasing availability of electronic documents and the rapid growth of the World Wide Web, the task of automatic categorization of documents

	became the key method for organizing the information and knowledge discovery. Document retrieval, categorization, routing and filtering can all be formulated as classification problems. The complexity of natural languages and the extremely high dimensionality of the feature space of documents have made this classification problem very difficult. The proposed work mitigates this difficult by providing an algorithm to classify documents into more than two categories (multi-class classification) at the same time by combining multi-objective technique with the genetic programming of classifiers based on multi-tree representation of documents. This combination has the potential to attain lower errors because classification accuracy on each class is represented as a distinct objective. Empirical evaluations show encouraging results and confirm that the proposed algorithm is feasible and effective.
T408	The Education Managers' Competencies in the 21th Century from the School Principals' Viewpoint in Tehran **Dr. Tahereh Bagherpour** and Dr. Ramezan Jahanian Department of Physical Education & Sports Science, Damghan Branch, Islamic Azad University, Semnan, Iran ***Abstract***— the study is carried out with the aim of determining the competencies needed by the education managers on the basis of survey. The statistical population includes all the principals in Tehran elementary schools, guidance schools, high schools and pre-university schools in the school year of 2009-2010 which is 3412. The sample contains 346 who have been selected by the random and stratified sampling on the basis of sample size Morgan's table. The means for gathering data is a questionnaire that its validity is confirmed by 35 experts. In addition, the reliability of this questionnaire is also calculated on the basis of Cornbach Alpha which is 78 %. The results of the data analysis show that the most important competencies needed by the education managers in the 21th century are: management and leadership competencies, social competencies, technological competencies, individual competencies, economical competencies, business competencies, Spiritual, moral and religious competencies, research competencies, environmental competencies, global and international competencies, political and cultural competencies. The obtained results in this study about the competencies required by the education managers in the 21th century have a high reliability and its application is recommended to all the managers.
T409	The Effects of Different Types of Educational Evaluation on Preschoolers' Creativity in Karaj **Dr. Ramezan Jahanian** and Dr. Tahereh Bagherpour Department of Education, Karaj Branch, Islamic Azad University, Karaj, Iran ***Abstract***— this study investigates the effects of different types of educational evaluation on preschoolers' creativity in Karaj on the basis of survey method and correlation. The statistical population consists of all pre-school teachers in Karaj

	who were 1218 participants in the academic year of 2012-2011-. The sample comprises 383 who were selected according to the stratified random sampling on the basis of Morgan's Formula for determining sample size. The survey instrument was a researcher-made questionnaire with 21 questions which was designed according to Likert scale. Its validity has been evaluated by 30 university professors and its reliability is calculated on the basis of Cronbach's alpha which is 0.83. In this study, the results reveal that there is no significant relationship between the initial, formative, cumulative evaluation and the creativity of students.

Coffee Break & Group Photo
16:00-16:10

Session Ⅳ Network information security and application
16:10-19:00
Session Chair: Prof. D P Sharma
AMIT, AMU MOEFDRE under UNDP & Faculty Ambassador (AI) under IBM's Cloud Computing Offering –USA

CL011	Reinforcement Learning for Online Maximum Power Point Tracking Control Ayman Youssef, **Mohamed El. Telbany** and Abdelhalim Zekry National Research Center, Electronics Research Institute, Giza, Computer and Systems Department, Egypt ***Abstract*—**The world wide resource crisis led scientists and engineers to search for renewable energy sources. Photovoltaic systems are one of the most important renewable energy sources. In this paper we propose an intelligent solution for solving the maximum power point tracking problem in photovoltaic systems. The proposed controller is based on reinforcement learning techniques. The algorithm performance far exceeds the performance of traditional maximum power point tracking techniques. The algorithm not only reaches the optimum power it learns also from the environment without any prior knowledge or offline learning. The proposed control algorithm solves the problem of maximum power point tracking under different environment conditions and partial shading conditions. The simulations results show satisfactory dynamic and static response and superior performance over famous perturb and observe algorithm.
CL012	Anomaly Intrusion Detection Based Upon Anomalous Events and Soft Computing Technique **Yingbing Yu** Department of Computer Science & Information Technology, Austin Peay State University, Clarksville, Tennessee, USA ***Abstract*—**Intrusion detection systems (IDSs) attempt to identify attacks by comparing new data to predefined signatures known to be malicious (misuse IDSs) or to a model of normal behavior (anomaly-based IDSs). This paper investigates a new model to more effectively detect anomaly intrusions from masqueraders. Events with different weight values based on historical data generated by Windows operating system are collected to build the normal user profiles as a template. A fuzzy system is applied to evaluate and classify the potential threat level from user new activities in a system. Experimental results show the promising results with a high detection rate of masqueraders and a low false alarm rate.

SH001	Malicious Detection Based on Relief and Boosting Multidimensional Features **YangXia Luo** School of information, Xi'an University of finance and economics, 710100, China ***Abstract*** —Aiming at the problem of large overhead and low accuracy on the identification of obfuscated and malicious code, a new algorithm is proposed to detect malicious code by identifying multidimensional features based on ReliefF and Boosting techniques. After a disassembly analysis and static analysis for the clustered malicious code families, the algorithm extracts features from four dimensions: two static properties (operation code sequences and bytecode sequence) and two features (system call graph and function call graph) which combines the semantic features to reflect the behaviour characteristic of the malware, and then selects important feature vectors based on Relief. Finally, ensemble learning is carried out, and the decision result is boosted based on weighted voting according to accuracy for a different feature analysis. It has been proven by experiment and comparison that the algorithms have a much higher accuracy of the testing dataset with low overhead.
SH013	Privacy Preservation in Location Based Services Sahana Shivaprasad, **Huian Li**, Xukai Zou Department of Computer and Information Science Purdue University Indianapolis, Indiana 46202, USA ***Abstract*--** Location based service (LBS) is one of the most popular mobile services today, which offers wide range of services that are based on information about the physical location of a user or device. Typical LBS includes real-time turn-by-turn directions, points of interest (POI), and social network services such as Facebook, Foursquare, Loopt, and Qype. However, user location privacy is a major concern in today's mobile applications and there has been significant research dedicated to address this issue. Various location privacy preserving mechanisms (LPPM) have been used to preserve privacy of the location information of mobile users. This survey aims to present privacy preserving mechanisms employed in the location based services. Moreover, the LPPMs are classified into cryptographic and non-cryptographic mechanisms, and a taxonomy of mechanisms is also discussed. Multiple defense mechanism attributes/goals for the protection of location privacy have been described in the literature. Furthermore, classification and comparison of different mechanisms and location privacy attacks are presented based on their protection attributes and adversarial goals. Strengths and weaknesses of different mechanisms are also highlighted.

SH014	The Average Information Ratio of Secret-Sharing Schemes for Access Structures Based on Coalescence of Graphs **Hui-Chuan Lu** Center for Basic Required Courses, National United University, Maioli 36003, Taiwan ***Abstract***—A perfect secret-sharing scheme is a method of distributing a secret among a set of participants in such a way that only qualified subsets of participants can recover the secret and the participants in any unqualified subset cannot obtain any information about the secret. The collection of all qualified subsets is called the access structure of the scheme. In a graph-based access structure, each vertex of a graph G represents a participant and each edge of G represents a minimal qualified subset. The average information ratio of a perfect secret-sharing scheme realizing a given access structure is the ratio of the average length of the shares given to the participants to the length of the secret. The infimum of the average information ratio of all possible perfect secret-sharing schemes realizing an access structure is called the optimal average information ratio of that access structure. In this paper, we study the optimal average information ratio of access structures based on coalescence graphs. We investigate how the optimal average information ratio changes under graph coalescence.
SH016	Secure Content Delivery Scheme based on Yaksha System for CCMANETs **Xian Guo,** Tao Feng, Jun-li Fang, JingWang, Ye Lu Lanzhou University of Technology, Lanzhou 730050, P. R. China ***Abstract***—Content-Centric Networking (CCN) is a candidate future Internet architecture that gives favorable promises in MANET environment. It is allowed that data of content producer is cached anywhere in Content Centric MANET (CCMANET). This scheme decoupling of data from the source make traditional end-end authentication transmission unavailable in CCMANET. To ensure high availability of the cached data only to legitimate users, Secure Content Delivery scheme based on Yaksha (YSCD) for CCMANET is proposed in this paper. Yaksha server manages users and verifies user identification, and distributes "license" only to legitimate user for publishing content to network or attaining content from network. In this paper, the license is the joint signature of the legitimate user and the Yaksha server. In YSCD, it is guaranteed that only the legitimate users can publish to the network and access the content cached on the network. Finally, we prove security properties of YSCD in Protocol Composition Logic (PCL).

SH017	Cyber security Strategies for Smart Grids Sergiu Conovalu, **Joon S. Park** School of Information Studies, Syracuse University, Syracuse, NY 13244, USA ***Abstract*--** Today, the development of information and communications technologies has changed the utility landscape dramatically. In particular, electricity distribution networks rely heavily on a multitude of intelligent systems and devices that communicate among each other in much more advanced ways than in the past. As the Smart Grid is becoming nowadays a critical component in the electricity delivery system, it is important to make sure the grid is equipped with adequate security mechanisms that are able to guarantee its reliable operation and real-time information exchange within the power infrastructure. Therefore, in this paper we analyze critical cybersecurity aspects associated with smart grid services, including previous cyber-attack cases on smart grids, potential vulnerabilities/threats, and advanced cybersecurity strategies for smart grids with technical and management measures. Ultimately, while the service providers should continuously enhance the traditional security measures such as authentication, access control, authorization, data encryption, public key infrastructure (PKI), firewalls, log analysis, intrusion detection systems, and network security protocols, we propose that the advanced technical measures should 1) make smart grids survivable even under cyber-attacks and internal failures; 2) employ a defense-in-depth approach; 3) employ a defense-in-depth approach; and 4) provide more scalable security measures. Furthermore, we also propose that the advanced management measures should 1) establish a cybersecurity governance strategy; 2) develop a strong incident response plan; 3) cultivate a culture of security; 4) employ a public-private partnership approach; and 5) comply with widely recognized security standards.
SH021	Smartphone Security Risks: Android LeePin Shing, LeeHur Shing, **Chen-Chi Shing**, Meng Chu Chiang, CheWei Yang, Tzu-Chieh Lu and Marn-Ling Shing ***Abstract*—**In the recent years, the smartphone has become one of the most popular devicesof communication.Smartphones areconvenient because of their small, portable size, as well as their ease of use. Many people know they need security for their computers, but they are not aware of the need for security in smartphones. In this paper, we want to discuss security of smartphones. We use list of top smartphone security risks the European Network and Information Security Agency (ENISA) and incorporate prevention actions that can be used as well as some additional security risks involved. Risks and threats are separate issues that should be known to the users of smartphones. The paper mainly focuses on risks but uses Android.Adrd as an example for threats. This paper specifically uses the Android operating system as an example.Google provides a set of cloud-based services that are available to any compatible Android device.These services are not part of the Android Open Source Project, but they are relevant to the security of most Android

	devices.The numerous examples in this paper shows that Google could improve their services supporting the security of Android in order to increase the overall security reports of smartphones.
SH022	Design and implementation of industrial firewall for Modbus/TCP **Wenli Shang**, Quansheng Qiao, Ming Wan and Peng Zeng Shenyang Institute of Automation Chinese Academy of Science, Shenyang and 110016, China ***Abstract***—For the fragile security status and the growing threat of attack on industrial control systems, it is particularly important to strengthen the technology of security protection. After a detailed study of the characteristics of industrial control systems, this paper put forward design scheme of industrial firewall based on Modbus / TCP protocol, combining "white list" security policies with deep packet inspection technology, and realizing on the Linux platform. The experimental results show that the firewall can effectively intercept illegal data stream and ensure the normal operation of the industrial control system.
SH102	Forensic Analysis to China's Cloud Storage Services CHEN Long, **ZHANG Qing** Institute of Computer Forensics, Chongqing University of Posts and Telecommunications, Chongqing ***Abstract*—**Nowadays, cloud storage is becoming increasingly popular among individuals and businesses. At the same time, there are an increasing number of illegal cases about preserving illegal information or stealing the company's confidential data through cloud storage service. Therefore, a study on digital forensic investigation of cloud storage services is necessary. Using two china's cloud storage services(360 and Baidu cloud storage service) as case studies, this paper discusses the types of terrestrial artifacts that are likely to remain on a client's machine and analyses the law of terrestrial artifacts after accessing to the cloud storage. At last the paper proposes a method to investigate and analyze the artifacts for reconstructing the event of user's activities.
SH202	Combining KNN and Decision Tree Algorithms to Improve Intrusion Detection System Performance Kazem Fathi1, **Sayyed Majid Mazinani** Imam Reza International University,Mashhad, Iran ***Abstract*--**Two types of algorithms are realized which have been used within the supervised of model of intrusion detection systems. These algorithms are either of type eager or lazy as far as their performance is concerned. At the learning phase, the lazy algorithms are fairly simple, however, the eager algorithms are highly effective. On the other hand the classification phase is in at most contrast with

	learning phase. The aim of this research is, taking the advantages of both lazy and eager algorithms to achieve a hybrid algorithm. This approach necessitates employing an eager algorithm of Decision Tree, on the training set, which has led to the creation of a set of Decisions. This set of Decisions is applied on the training set, which results in having a set of binary vectors. In order to enhance the training set these binary vectors were added as new attributes. After that with the lazy algorithm of nearest neighbors, we have classified the samples. The outcome of test results from existing algorithms has been compared with our proposed algorithm. The results show that the proposed algorithm outperforms where the volume of samples are high. The performance of the hybrid algorithm is also remarkable within platforms, with limited or very high processing resources.
SH203	Secure localization approach in wireless sensor network **Sayyed Majid Mazinani**, Mosayeb Safari Electrical Department of Imam Reza International University, Mashhasd, Iran ***Abstract*--**Wireless sensor networks have consisted of more than thousands nodes, which have been jointed together for achieving some specific reasons. The sensor information send to a base station named sink and supply with AC power. In most cases, the place of nodes is important for the network performance because of this reason we are using locating. Locating is one of techniques that have been used in wireless networks. Security and accuracy are the bases of locating applications. Practical wireless networks are faced with destructive interference, which have considerable effects on locating performance. In this article, a great and benign locating plane is introduced in order to reduce the effect of enemy attacks in wireless networks. The proposed method is consisting of two steps. In first step, the correctness investigation has been designed on the base of making a table with valid nodes in the base station. In second step, the mean square of Taylor series is used for estimation the sensor node places. The results of simulation verified the performance gain of our proposed scheme.
SH012	Protection Tiers and Their Applications for Evaluating Untrusted Code on A Linux-Based Web Server **Zhuhan Jiang,** Jiansheng Huang, and Rezina Akhter ***Abstract*--**Evaluating untrusted computer programs online by executing and testing them real-time has a challenging task of protecting the system integrity and the data confidentiality of the computer host. For the web based services on one of the most popular computer platforms, Linux, we propose three security protection tiers of different complexity and resource cost to incorporate the potentially unsafe application service via a web server. By utilizing a single regular Linux account of a corporate computer, or dual accounts as a combination, or multi-accounts of a dedicated computer, these three protection tiers can offer a trade-off between the simplicity in design and maintenance at the expense of a somewhat reduced security strength, and the more costly implementation and maintenance with a

	relatively better security strength. The need for such different tiers is especially true for our implemented in-house applications that aim to evaluate programming work automatically by executing the pertinent but untrusted client programs.

Dinner @ Hotel Restaurant
19:30-20:30

Conference Questionnaire

You are highly appreciated to fill this questionnaire. Your feedback from the following survey will allow us to perform a procedural evaluation and to enhance the key elements necessary for a successful IACSIT. Thank you!

(Where options are given, please underline your chosen response)

Name of the conference: (abbreviation)	Your Paper ID:
Your Name:	E-mail:
Current position:	☐Prof. ☐Assistant Prof. ☐Dr. ☐Engr. ☐PhD candidate ☐Graduate ☐junior faculty ☐senior faculty ☐Other(please specify)

1. How did you know or where did you learn about this conference?
   Recommendation ( ) please specify:
   _____
   Advertising Website ( ) please specify:
   _____
   Direct Mail Promotion from IACSIT ( )
   Others (please specify)
   _____

2. What were the key factors influencing your decision to attend?
   Speakers& Workshops ( )
   Indexing/Publisher ( ) please specify: _____
   Networking /discussion opportunity ( ) please specify: _____
   Titles and content of talks ( )
   Location/Venue ( )
   Other (please specify) _____

3. How do you think of the conference proceeding/journal?
   Very Good ( ) Good ( ) Average ( ) Dissatisfied ( )

4. How do you think the invited speakers?

Very Good ( ) Good ( ) Average ( ) Dissatisfied ( )

Your recommendation of excellent professor at this filed.

Name: _____ Email: _____

University: _____

5. What should this conference be improved?

_____

6. Where you suggest this conference to be held next year?

_____

Please use a 1 to 5 scale where "5" means "Very Satisfied" and "1" means "Very dissatisfied"

7. How satisfied were you with the conference materials provided?

☐1 ☐2 ☐3 ☐4 ☐5

8. How satisfied were you with the conference secretary's previous work? Did He/she reply the mail in time; did He/she try the best to meet your requirements?

☐1 ☐2 ☐3 ☐4 ☐5

9. Conference staff onsite was helpful and courteous

☐Strongly Disagree ☐Disagree ☐Agree ☐Strongly Agree

_____

10. How would you rate this conference compared to other conferences of this type that you have attended? Please comment on the overall quality, in your view, of the scientific program?

☐Excellent ☐Good ☐Average ☐Poor ☐Unsatisfactory

11. Will you recommend this conference to others?

☐Yes ☐No ☐Don't Know

Your comments and suggestions would be helpful to us to plan and organize future conferences:

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Conference information

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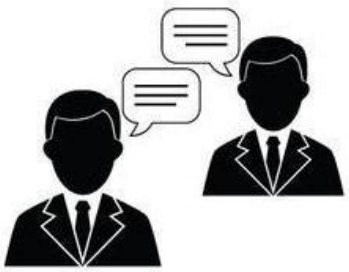

Note