ICWL 2011 Preliminary Program

8 December 2011 (Thu)			9 December 2011 (Fri)		
Time	**Description**		**Time**	**Description**	
8:00-8:45	Registration		8:30-9:00	Registration	
8:45-9:00	Opening Address Room: AG 710				
9:00-10:00	Keynote Speech 1 Motivating Participation in Social Learning Networks Prof. Julita Vassileva Session Chair: Elvira Popescu Room: AG 710		9:00-10:00	Keynote Speech 2 Reusability and Searchability of Learning Objects Prof. Timothy K. Shih Session Chair: Howard Leung Room: AG 710	
10:00-10:20	Coffee Break		10:00-10:20	Coffee Break	
10:20-12:00	Computer Supported Cooperative Learning and Serious Gaming Session Chair: Fan Yang Room: AG 710	SPeL Workshop Session Chair: Sabine Graf Room: AG 712	10:20-12:15	Competence Development and Professional Training Session Chair: Denis Gillet Room: AG 710	Web 2.0 and Social Learning (2) Session Chair: Chengjiu Yin Room: AG 712
12:00-13:30	Lunch		12:15-13:45	Lunch	
13:30-16:15	E-Learning Applications, Platforms, Tools, and Infrastructure Session Chair: Mart Laanpere Room: AG 710	Learner Modeling and Assessment (1) Session Chair: Frederick Li Room: AG 712	13:45-15:25	Learner Modeling and Assessment (2) Session Chair: Xiangfeng Luo Room: AG 710	KMEL Symposium (1) Session Chair: Dickson Chiu Room: AG 712
16:15-16:30	Coffee Break		15:25-15:40	Coffee Break	
16:30-18:10	Web 2.0 and Social Learning (1) Session Chair: Adriana Berlanga Room: AG 710	ELSM Workshop Session Chair: Neil Y. Yen Room: AG 712	15:40-17:30	Learning Resource Management and Recommendation Session Chair: Mirjana Ivanović Room: AG 710	KMEL Symposium (2) Session Chair: Dickson Chiu Room: AG 712
18:30-20:30	Reception		19:00-22:00	Banquet	

Keynote Speech 1

Title: Motivating Participation in Social Learning Networks

Speaker: Prof. Julita Vassileva, the University of Saskatchewan, Canada

Date: 8 December 2011 (Thursday) Session Chair: Elvira Popescu

Time: 9:00a.m.–10:00a.m. Venue: AG 710

Abstract:

Social Learning Environments allow learners to explore and contribute to open online spaces of learning materials. They need to support the learner in finding the right content, the right people ("right" for the context, the individual learner, purpose, learning style), and to motivate/incentivize people to learn and participate actively by discussing, helping, socializing and contributing. This talk will focus on the last issue, how to design the social learning network infrastructure so that it can motivate learners to participate, and more generally, to change their behaviours in a desirable way, beneficial for their own learning and for the community? Various motivational approaches exist. Some follow simple gamification rules. Others involve the design of rewards mechanisms and trust and reputation mechanisms. These mechanisms apply to all participants, like game rules. However, different people are motivated by different things, so it would be beneficial to personalize the incentives to every individual. Also since communities have different needs in different phases of their existence, it is necessary to model the changing needs of communities and adapt the incentive mechanisms accordingly. Therefore learner modeling and group modeling are important areas in the design of incentive mechanisms. Appropriately designed open learner models can support learners' self-efficacy and intrinsic motivation to achieve their learning goals. Social visualizations that reveal group models to the learners create awareness of the learning community as a whole and set the stage for reciprocation, group-attachment, social comparison and competition, which according to theories from the area of social psychology and behavioural economics can motivate people to participate.

Bio:

Julita Vassileva is a Professor of Computer Science at the University of Saskatchewan, Canada. She obtained her PhD (Mathematics, Cybernetics and Control Theory) in 1992 from the University of Sofia, Bulgaria in the area of Intelligent Tutoring Systems. Between 1992 and 1997 she worked as a Research Associate at the Federal Armed Forces University in Munich, Germany. She has been with the University of Saskatchewan since 1997. Her research areas involve human issues in decentralized software environments: user modeling and personalization, designing incentive mechanisms for encouraging participation and facilitating trust in decentralized software applications, such as online communities, social networks, multi-agent systems and peer-to-peer systems. Professor Vassileva is one of the Directors at Large of the UM Inc. Society. She is a member of the Executive Committee of the AI and Education Society, serves on the editorial board of the International Journal of User Modeling and User Adapted Interaction and of the Computational Intelligence Journal.

Keynote Speech 2

Title: Reusability and Searchability of Learning Objects

Speaker: Prof. Timothy K. Shih, National Central University, Taiwan

Date: 9 December 2011 (Friday) **Session Chair: Howard Leung**

Time: 9:00a.m.–10:00a.m. **Venue: AG 710**

Abstract:

Learning Objects (LOs) are atomic elements of lecture materials in e-learning. Creating high quality LOs is time consuming. Automatic mechanisms to support LOs reuse must be investigated. When an author creates learning materials, in order to reuse LOs from another person, it is necessary to search for these LOs. Thus, reusability and searchability are co-related research issues. This keynote starts from an introduction of metadata, follows by a discussion of the requirements to build a distributed repository, where LOs can be stored and shared. The concept of "Reusability Tree" to represent the relationships among relevant LOs and an infrastructure of LO repository will be presented. Relevant information while users are utilizing LOs, such as citations and time period persisted as well as user feedbacks will be used as critical elements for evaluating significance degree of LOs. Through theses factors, a mechanism to weight and rank LOs is discussed. The LONET (Learning Object Network), as an extension of Reusability Tree, is addressed and constructed to clarify the vague reuse scenario in the past, and to summarize collaborative intelligence through past interactive usage experiences. As a practical contribution, an adaptive algorithm is proposed to mine the social structure in our repository. The algorithm generates adaptive routes, based on past usage experiences, by computing possible interactive input, such as search criteria and feedback from instructors, and assists them in generating specific lectures.

Bio:

Dr. Shih is a Professor at the National Central University, Taiwan. He was the Dean of College of Computer Science, Asia University, Taiwan and the Department Chair of the CSIE Department at Tamkang University, Taiwan. Dr. Shih is a Fellow of the Institution of Engineering and Technology (IET). In addition, he is a senior member of ACM and a senior member of IEEE. Dr. Shih also joined the Educational Activities Board of the Computer Society. His current research interests include Multimedia Computing and Distance Learning. Dr. Shih has edited many books and published over 460 papers and book chapters, as well as participated in many international academic activities, including the organization of more than 60 international conferences. He was the founder and co-editor-in-chief of the International Journal of Distance Education Technologies, published by the Idea Group Publishing, USA. Dr. Shih is an associate editor of the IEEE Transactions on Learning Technologies. He was an associate editor of the ACM Transactions on Internet Technology and an associate editor of the IEEE Transactions on Multimedia. Dr. Shih has received many research awards, including research awards from National Science Council of Taiwan, IIAS research award from Germany, HSSS award from Greece, Brandon Hall award from USA, and several best paper awards from international conferences. Dr. Shih has been invited to give more than 30 keynote speeches and plenary talks in international conferences, as well as tutorials in IEEE ICME 2001 and 2006, and ACM Multimedia 2002 and 2007.

Conference Presentations

Note:

- The venue for all conference presentations is located at The Hong Kong Polytechnic University
- A conference full paper is allocated with 25 minutes for the presentation
- A conference short paper is allocated with 20 minutes for the presentation

Session: Computer Supported Cooperative Learning and Serious Gaming

Date: 8 December 2011 (Thursday) **Session Chair: Fan Yang**

Time: 10:20 a.m.–12:00 noon **Venue: AG 710**

- Strategies Used by Students on a Massively Multiplayer Online Mathematics Game
  Roberto Araya, Abelino Jiménez, Manuel Bahamondez, Pablo Dartnell, Jorge Soto-Andrade, Pablo González, Patricio Calfucura

- Learning Programming Languages through Corrective Feedback and Concept Visualisation
  Chris Watson, Frederick Li, Rynson W.H. Lau

- Extensible Multi-Platform Educational Game Framework
  Eugenio J. Marchiori, Ángel Serrano, Javier Torrente, Iván Martínez-Ortiz, Baltasar Fernández-Manjón

- A Study of Peer Discourse in Computer-Supported Collaborative Learning Environment
  Ken W. Li

Session: E-Learning Applications, Platforms, Tools, and Infrastructure

Date: 8 December 2011 (Thursday) **Session Chair: Mart Laanpere**

Time: 1:30 p.m.–4:15 p.m. **Venue: AG 710**

- Enabling Open Learning Process with Learning Activity Streams: Model, Metaphor and Specification
  Haifeng Man, Hong Chen, Jian Chen, Xiaokang Zhou, Yan Wu, Qun Jin

- An Ontology Based e-Learning System Using Antipatterns
  Dimitrios Settas, Antonio Cerone

- Opportunities and Challenges of Formal Instructional Modeling for Web-based Learning
  Michael Derntl, Susanne Neumann, Petra Oberhuemer

- Evaluating the Performance of a Diagnosis System in School Algebra
  Naima El-Kechaï, Élisabeth Delozanne, Dominique Prévit, Brigitte Grugeon, Françoise Chenevotot

- A Problem-Based Learning Approach for Green Control & IT in a Master Program
  Emmanuel Witrant, Elvira Popescu

- Development of Web-based Remote Laboratory for Education and Research on RF Engineering (Short Paper)
  Wonshil Kang, Hyunchul Ku

- Educational Justifications for the Design of the ISCARE Computer Based Competition Assessment Tool (Short Paper)
  Manuel Fernández Molina, Pedro J. Muñoz-Merino, Mario Muñoz-Organero, Carlos Delgado Kloos

Session: Learner Modeling and Assessment (1)

Date: 8 December 2011 (Thursday) **Session Chair: Frederick Li**

Time: 1:30 p.m.–3:10 p.m. **Venue: AG 712**

- Rule-Based Reasoning for Building Learner Model in Programming Tutoring System
  Boban Vesin, Mirjana Ivanović, Aleksandra Klašnja-Milićević, Zoran Budimac

- A Personalized Genetic Algorithm Approach for Test Sheet Assembling
  Peipei Gu, Zhendong Niu, Xuting Chen, Wei Chen

- Fuzzy Cognitive Map based Student Progress Indicators
  Fan Yang, Frederick Li, Rynson W.H. Lau

- Evaluating the Student Activity Meter: two Case Studies
  Sten Govaerts, Katrien Verbert, Erik Duval

Session: Web 2.0 and Social Learning (1)

Date: 8 December 2011 (Thursday) **Session Chair: Adriana Berlanga**

Time: 4:30 p.m.–6:10 p.m. **Venue: AG 710**

- eMUSE - Integrating Web 2.0 Tools in a Social Learning Environment
  Elvira Popescu, Dan Cioiu

- Learn-as-you-go: New Ways of Cloud-based Micro-Learning for the Mobile Web
  Dejan Kovachev, Yiwei Cao, Ralf Klamma, Matthias Jarke

- Interrelation between Trust and Sharing Attitudes in Distributed Personal Learning Environments: The Case Study of LePress PLE
  Sónia C. Sousa, Vladimir Tomberg, David R. Lamas, Mart Laanpere

- Positive Influence Dominating Set in E-learning Social Networks
  Guangyuan Wang, Hua Wang, Xiaohui Tao, Ji Zhang

Session: Competence Development and Professional Training

Date: 9 December 2011 (Friday) **Session Chair: Denis Gillet**

Time: 10:20 a.m.–12:15 p.m. **Venue: AG 710**

- ICT-based School Collaboration, Teachers' Networks and Opportunities for Teachers' Professional Development - a Case Study on eTwinning
  Riina Vuorikari, Adriana Berlanga, Romina Cachia, Yiwei Cao, Sibren Fetter, Anne Gilleran, Ralf Klamma, Yves Punie, Santi Scimeca, Peter Sloep

- Web-based Self- and Peer-assessment of Teachers' Educational Technology Competencies
  Hans Põldoja, Terje Väljataga, Kairit Tammets, Mart Laanpere

- Designing the Competence-driven Teacher Accreditation
  Kairit Tammets, Kai Pata, Mart Laanpere, Vladimir Tomberg, Dragan Gašević, Melody Siadaty

- Occupational guidance through ELECTRE method (Short Paper)
  Stefanos Ougiaroglou, Ioannis Kazanidis

- A competence bartering platform for learners (Short Paper)
  Freddy Limpens, Denis Gillet

Session: Web 2.0 and Social Learning (2)

Date: 9 December 2011 (Friday) **Session Chair: Chengjiu Yin**

Time: 10:20 a.m.–11:35 a.m. **Venue: AG 712**

- Web 2.0 with Alert Support for Busy Parents in Suzuki Method of Children Music Teaching
  Cheuk Ting Chan, Dickson K.W. Chiu

- Social Tagging to Enhance Collaborative Learning
  Élise Lavoué

- A Framework to Enrich Student Interaction via Cross-Institutional Microblogging
  Suku Sinnappan, Samar Zutshi

Session: Learner Modeling and Assessment (2)

Date: 9 December 2011 (Friday) **Session Chair: Xiangfeng Luo**

Time: 1:45 p.m.–3:15 p.m. **Venue: AG 710**

- Antecedents of students' intent to watch online theory videos as part of an Online Learning Platform
  Frank Geert Goethals, Loïc Plé, Maxime Taisne

- Measuring Student E-learning Readiness: A Case about the Subject of Electricity in Higher Education Institutions in Turkey
  Dursun Akaslan, Effie L-C. Law

- Dynamical User Networking and Profiling Based on Activity Streams for Enhanced Social Learning (Short Paper)
  Xiaokang Zhou, Qun Jin

- Stage Predicting Student Stay Time Length on Webpage of Online Course Based on Grey Models (Short Paper)
  Qingsheng Zhang, Kinshuk, Sabine Graf, Ting-wen Chang

Session: Learning Resource Management and Recommendation

Date: 9 December 2011 (Friday) **Session Chair: Mirjana Ivanović**

Time: 3:40 p.m.–5:30 p.m. **Venue: AG 710**

- Automated Lecture Template Generation in CORDRA-based Learning Object Repository
  Neil Y. Yen, Timothy K. Shih, Qun Jin, Li-Chieh Lin

- Combining Collaborative Filtering and Sequential Pattern Mining for Recommendation in E-learning Environment
  Yi Li, Zhendong Niu, Wei Chen, Wenshi Zhang

- Supporting Resource-based Learning on the Web using automatically extracted Large-scale Taxonomies from multiple Wikipedia Versions (Short Paper)
  Renato Domínguez García, Philipp Scholl, Christoph Rensing

- Association Link Network: an Incremental Web Resources Link Model for Learning Resources Management (Short Paper)
  Hongming Zhu, Xiangfeng Luo, Zheng Xu, Jun Zhang

- Recommendation in e-learning social networks (Short Paper)
  Pierpaolo Di Bitonto, Teresa Roselli, Veronica Rossano

Workshop Presentations

Note:

- The venue for all workshop presentations is located at The Hong Kong Polytechnic University
- A workshop paper is allocated with 20 minutes for the presentation

Session: SPeL Workshop (SPeL 2011: 4th International Workshop on Social and Personal Computing for Web-Supported Learning Communities)

Date: 8 December 2011 (Thursday) **Session Chair: Sabine Graf**

Time: 10:20 a.m.–11:40 a.m. **Venue: AG 712**

- Activity Theory as a Design Framework for Collaborative Learning Using Google Applications Technology
  Ronnie Cheung, Douglas Vogel

- A Framework for Integrating Motivational Techniques in Technology Enhanced Learning
  Keri Baumstark, Sabine Graf

- Different Roles of Agents in Personalized Learning Environments
  Mirjana Ivanović, Dejan Mitrović, Zoran Budimac, Boban Vesin

- E-Learning 3.0: anyone, anywhere, anytime, and AI
  Neil Rubens, Dain Kaplan, Toshio Okamoto

Session: ELSM Workshop (ELSM 2011: First International Workshop on Enhancing Learning with Social Media)

Date: 8 December 2011 (Thursday) **Session Chair: Neil Y. Yen**

Time: 4:30 p.m.–6:10 p.m. **Venue: AG 712**

- A "Milky Way Research Trend" system for Survey of Scientific Literature
  Chengjiu Yin, Yoshiyuki Tabata, Sachio Hirokawa

- A Personalized Quiz Game Based on Multi-Agent System
  Martin M. Weng, Fuhua Lin, Timothy K. Shih

- Development Research on Instructional Design Competencies Testing Scale for Student Teachers
  Dong Yan

- Preliminary study to the inquiry learning social network supported by the Internet of Things
  Qian Fu, Xiaonan Cao

- Blended Learning Support with Social Media Empowered by Ubiquitous Personal Study
  Xiaokang Zhou, Haifeng Man, Hong Chen, Yan Wu, Qun Jin

KMEL 2011 : The 1st International Symposium on Knowledge Management and E-Learning

Note:

- The venue for all symposium presentations is located at The Hong Kong Polytechnic University
- A symposium paper is allocated with 20 minutes for the presentation

Session: KMEL Symposium (1)

Date: 9 December 2011 (Friday) **Session Chair: Dickson Chiu**

Time: 1:45 p.m.–3:25 p.m. **Venue: AG 712**

- A Quality Assurance Support System for Learning-Object Development
  Nopachat Kalayanapan, Vilas Wuwongse, Kornschnok Dittawit

- Timeliner: Supporting Collaborative Scientific Writing
  Vladimir Tomberg, David Lamas, Mart Laanpere

- Optimization of industrial Neural Network simulators for GPGPUs
  Amer Wafai, Zaheer Ahmed, Rainer Keller, Sven Holzmann, Björn Sander, Michael Resch

- Personal Learning Environments for Education: A Review and Future Directions
  BaoYng Teresa Liew, MyungHee Kang

- EsiTrace : a user side trace & annotation collection tool
  Abdelmoumene Louifi, Nabila Bousbia, Faiçal Azouaou, Fodil Merzoug

Session: KMEL Symposium (2)

Date: 9 December 2011 (Friday) **Session Chair: Dickson Chiu**

Time: 3:40 p.m.–5:20 p.m. **Venue: AG 712**

- An Iterative Approach Towards Interactive Digital Narrative – Early Results With the Advanced Stories Authoring and Presentation System
  Hartmut Koenitz

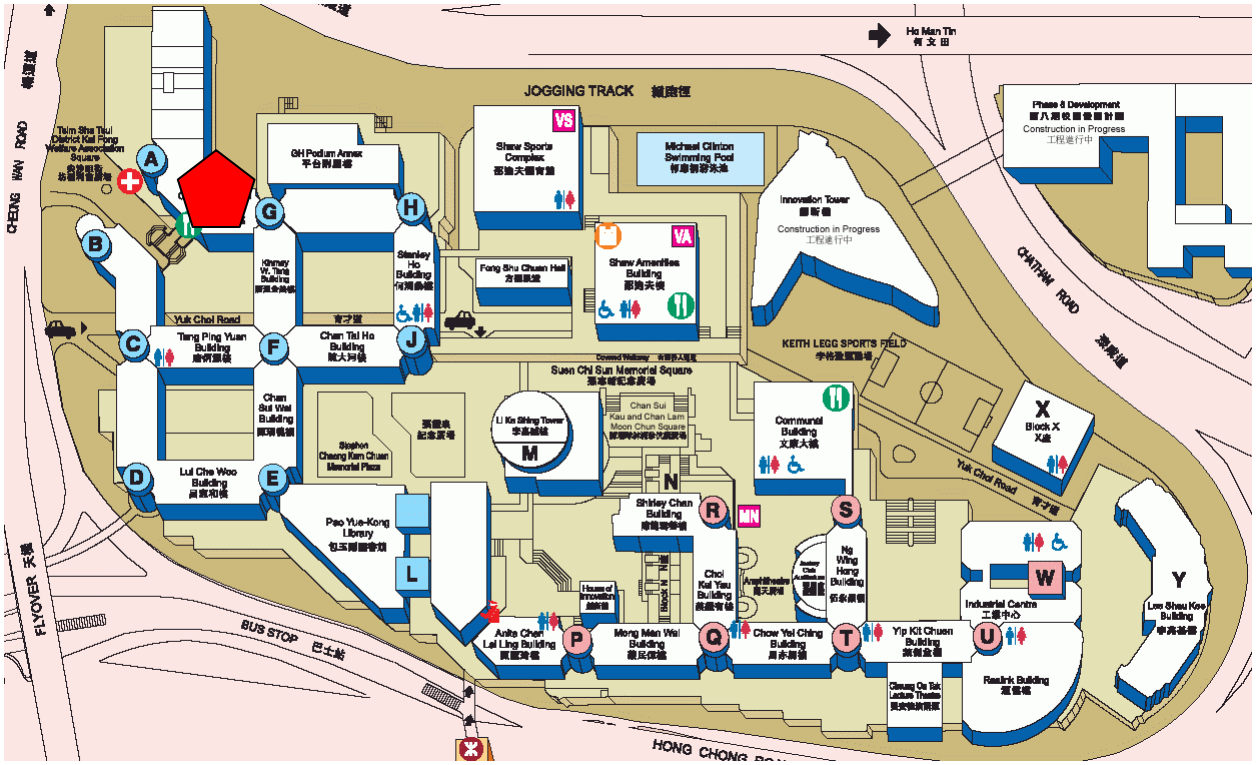
- HCI study for Culturally useful Knowledge Sharing
  Cat Kutay

- Copyright Challenges Facing the Website Design Industry: A Survey with Creative Directors in Hong Kong
  Ming Cheung

- Collaborative eLearning Management System (CLMS) Framework for Technical Subject Teaching : Design and Usability
  Siti Rosni Mohamad Yusoff and Nor Azan Mat Zin

- Didactical Competence Modeller: Dynamic Story Creation for Serious Games
  Claudia Ribeiro, Joao Fernandes and Joao Pereira

Getting to the Conference Venue



Conference Venue: Red pentagon, 7th Floor

Location: Room AG 710 and AG 712,
7/F, Chung Sze Yuen Building (Building AG),
The Hong Kong Polytechnic University

Direction:

- If you are coming from the MTR Hung Hom Station, use exit A to cross the bridge and get to the campus. Then walk straight and then turn left to reach core G. Take the lift to the 7th floor and turn right for AG core when given three choices of walking direction.
- If you are coming from the Main entrance of the university at the southwest direction, enter Chung Sze Yuen Building (Core A) next to the fountain. Take the lift to the 7th floor.