

Wednesday 21st February 2007

08:00 - 09:00

Registration and Coffee

09:00 - 10:00

Trinity Esplanade Room

Opening Speech by Professor Jeanette Hackett
Vice Chancellor, Curtin University of Technology

**Keynote Presentation by Ambassador-at-large
Chuan-Leong Lam**

*The Singapore Infocomm Technology (ICT) System as a
form of Digital Eco-economic System*

Ministry of Foreign Affairs, Singapore

Chair: Ernesto Damiani, Italy

10:00 - 10:15

Ellis Room

Morning Tea Break

10:15 – 12:00

Clifton Room

Infrastructures for Digital Ecosystems

Chair: Andreas Wombacher, The Netherlands

**An Investigation about Process Matchmaking
Performances of Unstructured and Decentralised Digital
Environment Topologies**

Bugra Cakir, Hurevren Kilic - Turkey

The Emergence of Complex digital Business

Martin Scicluna - Australia

**A Knowledge Management Platform for Supporting
Digital Business Ecosystems based on P2P and SOA
Technologies**

*Nikos Pappas, Fotis Kazasis, George Anestis, Nektarios
Gioldasis, Stavros Christodoulakis - Greece*

**Agent Mediated Peer-to-Peer Mobile Service-Oriented
Architecture**

*Peter Leong, Chunyan Miao, Beng Kiat Lim, Jian Wei Lim,
Clifford Chen, Nur Dianna, Wen Bin Toh - Singapore*

10:15 – 12:00

Holloways Room

Digital Business Ecosystems – Models and Modelling (I)

Chair: Ernesto Damiani, Italy

**Conceptual and Business Models for Customer-Centric
Business Ecosystems**

*Garyfallos Fragidis, Konstantinos Tarabanis, Adamantios
Koumpis - Greece*

**Business Modelling Language: A Framework Supporting
Interoperability in Custer of SMEs**

Angelo Corallo, Emanuele Caputo, Virginia Cisternino - Italy

A State Machine Executing UMM Business Transactions

Christian Huemer, Marco Zapletal - Austria

Contract Modelling for Digital Business Ecosystems

*Jason Finnegan, Paul Malone, Alicia Espinosa Marañon,
Pedro Bueso Guillén – Ireland*

10:15 – 12:00
Trinity Esplanade Room

Self Organisation of Digital Ecosystems

Chairs: Mukesh Mohania, India, Farookh Hussain, Australia

A Coordination Model for Distributed Transactions in Digital Business Ecosystems

Amir Razavi, Sotiris Moschoyiannis, Paul Krause - United Kingdom

Simulation of a Self-Optimising Digital Ecosystem

Thomas Kurz, Thomas Heistracher - Austria

Towards the Creation of a Digital Business Ecosystem for Shoe Manufacturing Domain

Claudia-Melania Chituc, Cesar Toscano, Americo Azevedo – Portugal

Cooperative Behaviour of Location Aware Nodes in Ad-hoc Networks

Colin Lemmon, Phillip Musumeci - Australia

12:00 - 13:00

Lunch

13:00 - 13:40
Trinity Esplanade Room

Keynote Presentation by Dr Paolo Dini

Structure and Outlook of Digital Ecosystems Research

London School of Economics and Political Science, United Kingdom

Chair: Ernesto Damiani, Italy

13:40 - 15:15
Clifton Room

Trust and Risk in Digital Ecosystems

Chair: Tharam S. Dillon, Australia

A Trust Model for Simple Negotiation

John Debenham, Carles Sierra - Australia

DEco Arch: Trust and Reputation Aware Service Brokering in Digital Ecosystems

Stefan Schmidt, Robert Steele, Tharam Dillon - Australia

The Effect of Trust in Product Chains in a Digital Business Ecosystem

Konstantinos Giannoutakis, Maria Petrou - United Kingdom

13:45 - 15:15
Holloways Room

Digital Business Ecosystems – Models and Modelling (II)

Chair: Ernesto Damiani, Italy

Modelling Semantics of Business Rules

Paolo Ceravolo, Cristiano Fugazza, Marcello Leida - Italy

Activity Theory for OSS Ecosystems

Lorna Uden, Ernesto Damiani, Gabriele Gianini, Paolo Ceravolo - Italy

Digital Eco-systems Pre-Design: Variety Analyses, System Viability and Tacit System Control Mechanisms

Terence Love, Trudi Cooper – Australia

System Level Analysis of How Businesses Adjust to Changing Environment in the Digital Eco System

Ana Hol, Athula Ginige, Robyn Lawson - Australia

13:45 - 15:15
Trinity Esplanade Room

Service Oriented Architectures for Digital Ecosystems

Chair: Gabriele Gianini, Italy

Service Communities: A Structuring Mechanism for Service-Oriented Business Ecosystems

Nirmit Desai, Pietro Mazzoleni, Stefan Tai - USA

Web Services and Java Middleware Functional and Performance Analysis for SOA

Matjaz Juric, Marjan Hericko, Tatjana Welzer, Ivan Rozman, Ana Sasa, Marjan Krisper – Slovenia

Soundness and Equivalence of Petri Nets and Annotated Finite State Automate: A Comparison in the SOA Context

Andreas Wombacher, Axel Martens – The Netherlands

15:15 - 15:30
Ellis Room

Afternoon Tea Break

15:30 - 17:00
Clifton Room

Trust and Risk in Digital Ecosystems (II)

Chair: Tharam S. Dillon, Australia

A Reliable Transaction Processing Framework for Digital Business Ecosystems

Adil Hammadi, Saqib Ali, Fei Liu - Australia

A Methodology for Semantic and Quantitative Risk Measurement in Digital Business Ecosystem Environments

Omar Hussain, Elizabeth Chang, Farookh Hussain, Tharam Dillon - Australia

Collaborative Process Driven Risk Management for Enterprise Agility

Achim Karduck, Amadou Sienou, Elyes Lamine, Herve Pingaud – Germany

Open Negotiation Environment: An Open Source Self-Learning Decentralised Negotiation Framework for Digital Ecosystems

Luigi Telesca, Jason Finnegan, Pierfranco Ferronato, Paul Malone, Francesco Ricci, Katarina Stanoevska - Australia

15:30 - 17:00
Holloways Room

Digital Domain Ecosystems – e-Learning Ecosystems

Chair: Vanessa Chang, Australia

E-Learning Ecosystem (ELES) – A Holistic Approach for the Development of more Effective Learning Environment for Small-and-Medium Sized Enterprises (SMEs)

Vanessa Chang, Christian Guetl - Australia

A Computational Effective Document Semantic Representation

Robert Williams - Australia

The Future of E-learning – E-learning Ecosystem
*Lorna Uden, Ince Trisnawaty Wangsa, Ernesto Damiani -
United Kingdom*

17:00 – 19:00
Poolside Deck
(weather permitting)

Welcome Reception
Host: Tharam S Dillon, Australia

Thursday 22nd February 2007

08:00 - 09:00

Coffee

09:00 - 10:00

Trinity Ellis Room

Keynote Presentation by Professor Ian Sommerville

Design for Failure: Software Engineering Challenges of Digital Ecosystems

St. Andrews University, United Kingdom

Chair: Tharam S. Dillon, Australia

10:00 – 10:15

Ellis Room

Morning Tea Break

10:15 – 12:00

Clifton Room

Intelligent Digital Ecosystems (I) – Knowledge Management

Chairs: Xinghuo Yu, Elizabeth Chang, Australia

An Integrating Text Retrieval Framework for Digital Ecosystems Paradigm

Dengya Zhu, Heinz Dreher - Australia

An e-Groupware based on Multi Agents Systems for Knowledge Management

Davy Monticolo, Vincent Hilaire, Abder Koukam, Samuel Gomes - France

10:15 – 12:00

Holloways Room

Digital Business Ecosystems for Small Medium Enterprises (SMEs) (I)

Chair: Csaba Szabo, Hungary

Monitoring Collaboration from a Value Perspective

Lianne Bodenstaff, Andreas Wombacher, Manfred Reichert, Roel Wieringa - The Netherlands

A Method for Service Quality Assessment in a Service Ecosystem

Chen Wu, Elizabeth Chang - Australia

SMEs in Developing Countries Face Challenges in Adopting e-Commerce Technologies

Mahesha Kapurubandara, Robyn Lawson - Australia

10:15 – 12:00

Trinity Esplanade Room

Invited Session: e-Humanities (I): Social Networks

Chairs: Marc Wilhelm Küster, Germany and Matthew Allen, Australia

Role of Mobile Multimedia Systems in Digital Business Ecosystems

Nalin Sharda - Australia

Agents and People Activities in Web-services Based Business Processes

Ana Sasa, Matjaz Juric, Marjan Krisper - Slovenia

OpenSocial: From Social Networks to Social Ecosystems

Juliana Mitchell-Wong, Ryszard Kowalczyk, Albenia Roshelova, Bruce Joy, Henry Tsai - Australia

12:00 - 13:00

Lunch

13:00 - 13:40

Trinity Esplanade Room

Invited Plenary Presentation by Boris Novak, Jane MacMaster and Mike Kalms, DoD

The RPDE Organisation: A Digital Ecosystem in the Australia Defence Sector

Department of Defence (DoD), Canberra, Australia

Chair: Tharam S. Dillon, Australia

13:45 - 15:15

Clifton Room

Intelligent Digital Ecosystems (II) – Semantic Views

Chairs: Professor Xinghuo Yu Professor Elizabeth Chang, Australia, Australia

Determining and Satisfying Search Users Real Needs via Socially Constructed Search Concept Classification

Dengya Zhu, Heinz Dreher - Australia

Benefits of Ontologies in Real Time Data Access

Zhan Cui, Ernesto Damiani, Marcello Leida - Italy

13:45 - 15:15

Holloways Room

Digital Business Ecosystems for Small Medium Enterprises (SME's) (II)

Chair: Csaba Szabo, Hungary

On the Complexity of Compensation Handling in WS-BPEL 2.0 for 3rd Party Logistics

Yi He, Paul Watters - Australia

Towards Digital Ecosystems for Skill Based Industrial Clusters: Lessons from the 'Digital Mandi' Project

Runa Sarkar, T. V. Prabhakar, Jayanta Chatterjee - India

Developing a Knowledge Base of Regulatory Issues in the Use of FS and OS Software the Experience of the European SME Sector

Panayiota Tsatsou, Gordon Gow, Silvia Elaluf-Calderwood, Kristina Glushkova - United Kingdom

13:45 - 15:15

Trinity Esplanade Room

Invited Session: e-Humanities (II): Social Ecology

Chairs: Marc Wilhelm Küster, Germany, Matthew Allen, Australia

Device Ecology: A Micro Digital Ecosystem

Maria Indrawan, Sea Ling, Seng Wai Loke - Australia

The Role of IT Governance in the Evolution of Organisations in the Digital Economy: Cases in Australian Higher Education

Jyotirmoyee Bhattacharjya, Vanessa Chang - Australia

15:15 - 15:30
Ellis Room

Afternoon Tea Break

15:30 - 17:00
Clifton Room

Security and Privacy in Digital Ecosystems

Chairs: Chang-Tsun Li, UK, Vidyasagar Potdar, Australia

An Environmentally Adaptive Conceptual Framework for Addressing Information Privacy Issues in Digital Ecosystems

Geoff Skinner, Elizabeth Chang - Australia

Towards Client Privacy Policy Enforcement for Small-Medium Enterprises

Assadarat Khurat, Joerg Abendroth, Shane Bracher, Padmanabhan Krishnan - Germany

Embedded Security Solution for Digital Safe-Guard Ecosystems

Michael Grassner – Austria

Conceptual Modelling: A Privacy Perspective

Sabah Al-Fedaghi, Fadi Al-Turjman – Kuwait

15:30 - 17:00
Trinity Esplanade Room

Invited Presentations

Chair: John Debenham, Australia

Taking Digital Ecosystems to SMEs - A European Case Study

Neil Rathbone - Australia

TextGrid as a Digital Ecosystem

Marc Küster, Christoph Ludwig, Andreas Aschenbrenner - Germany

19:00 – 23:00

Conference Dinner

Host: Queensland Government

Friday 23rd February 2007

08:00 - 09:00

Coffee

09:00 - 10:00

Trinity Esplanade Room

Keynote Presentation by Honourable Dr Mal Bryce AO

Telecommunications: Key Infrastructure for the Digital Revolution and the Global Knowledge Economy
Western Australia Technology and Industry Advisor Council
Chair: Elizabeth Chang, Australia

10:00 – 10:15

Ellis Room

Morning Tea Break

10:15 – 12:00

Clifton Room

Digital Ecosystems Technology (I)

Chairs: Kuldar Taveter, Nalin Sharda, Australia

A Service-Oriented Peer-to-Peer Architecture for a Digital Ecosystem

Jan Sacha, Bartosz Biskupski, Dominik Dahlem, Raymond Cunningham, Jim Dowling, Rene Meier - Ireland

Querying MOF Repositories: The Design and Implementation of the Query Metamodel Language (QML)

Giorgos Kotopoulos, Fotis Kazasis, Stavros Christodoulakis - Greece

Analysis of Information Technology Evolution: A Entropy Tree Perspective

SeongWoo Kim, Sunshin An - South Korea

The Impact of Transient Loads on the Performance in Service Ecologies

Ralph Deters - Canada

10:15 – 12:00

Holloways Room

Special Session: Signal & Image Applications for DES (I)

Chair: Chang-Tsun Li, UK

Steganographic Method for Colour Image Using Expandable Progressive Exponential Clustering

Chang-Tsun Li, Yue Li - United Kingdom

An Improved Digital Rights Management System Based On Smart Cards

Hung-Min Sun, Chi-Fu Hung, Chien-Ming Chen – Taiwan

10:15 – 12:00

Trinity Esplanade Room

Workshop: Health Ecosystems (I)

Chairs: Farookh Hussain and Amandeep Sidhu, Australia

Current Status of Biomedical Ontologies: Developments in 2006

Amandeep Sidhu, Tharam Dillon, Elizabeth Chang - Australia

A Conceptual Matrix Model for Biological Data Processing

Jingyu Hou, Wanlei Zhou - Australia

12:00 - 13:00

Lunch

13:00-13:40

Trinity Esplanade Room

Invited Plenary Presentation by Professor David Wood

Eco-Tourists, Eco-Tourism and Eco-Environments: A social, Cultural and Economic Impact

Executive Dean of Humanities, Curtin University of Technology, Australia

Chair: Elizabeth Chang, Australia

13:45 - 15:15

Clifton Room

Digital Ecosystems Technology (II)

Chairs: Kuldar Taveter, Nalin Sharda, Australia

Using Cellular Automata for Feature Construction – Preliminary Study

Matej Mertik, Mykola Pechenizkiy, Gregor Štiglic, Peter Kokol - Slovenia

Automata Semantics and Analysis of BPEL

Yongyan Zheng, Paul Krause - United Kingdom

Dynamic Replanning of Web Service Workflows

Rainer Berbner, Michael Spahn, Nicolas Repp, Oliver Heckmann, Ralf Steinmetz - Germany

13:45 - 15:15

Holloways Room

Special Session: Signal & Image Applications for DES (II)

Chair: Chang-Tsun Li, UK

A Robust Technique of Anti Key-Logging using Key-Logging Mechanism

Muzammil Baig, Waqar Mahmood - Pakistan

An Improved Orthogonal Dirty-Paper Coding Method for Watermarking Applications

Xiaotian Xu, Yong Liang Guan, Kah Chan The - Singapore

13:45 - 15:15

Trinity Esplanade Room

Workshop: Health Ecosystems (II)

Chairs: Farookh Hussain and Amandeep Sidhu, Australia

Protein Attributes Microtuning System (PAMS): An Effective Tool to Increase Protein Structure Prediction by Data Purification

Fan Zhang, David Povey, Paul Krause - United Kingdom

Unsupervised Clustering of Gene Expression Time Series with Conditional Random Fields

Yinyin Yuan, Chang-Tsun Li - United Kingdom

SSLE: A Language and an Interactive Editor for the Semantic Description of Services in MOF Architectures

Nektarios Gioldasis, Themistoklis Dakanalis, George Anestis, Nikos Pappas, Fotis Kazasis, Stavros Christodoulakis - Greece

Biology of Applied Digital Ecosystems

Gerard Briscoe, Suzanne Sadedin, Gregory Paperin - United Kingdom

15:15 - 15:30

Ellis Room

Afternoon Tea Break

15:30 - 17:00

Clifton Room

Digital Ecosystems Technology (III)

Chairs: Kuldar Taveter, Nalin Sharda, Australia

Detection of Fractal Breakdowns by the Holder Filter in the Novel Real-Time Traffic Pattern Detector for the Internet Applications

Wilfred Lin, Tharam Dillon, Allan Wong - Australia

Environmental Design for Muscle Cell Culture with Magnetic Field

Shigehiro Hashimoto, Shuichi Mochizuki, Yusuke Morita, Hiroshi Tsutsui, Masahiko Yshiura, Kenzo Akazawa, Mieko Ohsuga, Sadahito Uto, Hajime Otani, Toshiya Fujisato - Japan

Development of Inductively Coupled Wireless Radio Frequency Coil for Magnetic Resonance Scanners

Tomohiro Sahara, Shigehiro Hashimoto, Hiroshi Tsutsui, Shuichi Mochizuki, Kenichi Yamasaki, Hideo Kondo, Eiji Yamada, Kenzo Akazawa, Kazuo Okuyama, Yuichi Inoue - Japan

15:30 - 17:00

Trinity Esplanade Room

Panel Discussion by all Tracks Chairs

The Vision of Digital Ecosystems and Technology

Chair: Ernesto Damiani, Italy

17:00 – 17:30

Trinity Esplanade Room

Closing Speeches

Chair: Ernesto Damiani, Italy