The Innovation Forum 2013 @ Silicon Valley

Co-Chairs:

Achim P. Karduck, Furtwangen University, Germany

O. Sinan Tumer, Senior Director SAP Co-Innovation Lab, USA

http://dest2013.digital-ecology.org/

The 3rd day of IEEE DEST 2013 will be particularly devoted to the "Innovation Adoption Forum @ Silicon Valley". The focus is on the strategic and operational impetus of Digital Ecosystems [1] for SEED (Social, Economic and Environmental Development).

With 2 Keynotes and a Panel of distinguished participants from the USA, Asia/Pacific, and Europe, the various global perspectives are covered. With "Sustainable Stanford" [2] and Stanford´s "Wood Institute for the Environment" [3], strategic directions of Stanford University with respect to SEED are included. Sustainable Stanford´s vision is to *"create a healthier environment now and richer possibilities for generations to come"* and to *"show sustainability in action"*. The Wood Institute for the Environment mission is *"to produce breakthrough environmental solutions that protect and nurture our planet to meet the vital needs of people today and for generations to come.* The Forum will position it´s contributions within the SEED Framework by iFOSSF [4], introduced at the SEED Inauguration Workshop at IEEE DEST 2013.

1)   Co-Innovation

Formation of Application-driven Research Clusters in the ICT sector to bring together leading private and public companies, independent software vendors, system integrators, technology vendors, and academic institutions in a network of groups can turn inventions much faster into innovations successfully in the global market. These user communities should form a collaborative ecosystem to stimulate co-innovation and the development of high-impact on business solutions. The Forum explicitly focuses on the transfer/adoption of innovation into practice or reality.

At IEEE DEST 2010 in Dubai, the initiative on Innovation Adoption for the IEEE DEST Conference Series has been introduced. The Forum aims to bring together stakeholders from all areas of the collaborative ecosystem: industry, political leaders and the public, to debate the role of **ICT as a key enabler** for economic growth, social development and

individual well-being. Our Keynotes, Panels and Sessions will tackle the multifaceted challenges from the various stakeholders' perspectives:

- For the public sector: ensuring high-quality affordable healthcare to cope with the impacts of an ageing population, the fight against climate change, improving energy efficiency, fostering and developing sustainable communities, ensuring higher quality and better access to education, and being more effective in dealing with security threats.
- Forward-looking procurement strategies such as Living Labs and pre-commercial procurement can address these challenges by procuring R&D services that enables public and private procurers to share the risks and benefits of designing, prototyping and testing new products and services as Early Adaptors of new R&D enables them to drive innovation from the demand side.

Sustainable development has been defined in 1987 by the UN Commission on Environment and Development as: *„Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs* [5, 6]". Essentially, the underlying evolutionary process harmonizes the effective and efficient utilization of resources, financial investment objectives, progress of technology advancement, and institutional change. The three main pillars of sustainable development include economic growth, environmental protection, and social development.

SEED (Social, Economic and Environmental Development) is fundamentally based on education, resource allocation, local-led innovation, and collaboration in all three SEED-areas. Radical change for SEED is possible and required, as Ernst Ulrich von Weizsäcker outlines in Factor 5 [7]. He provides examples for transforming the global economy on an economic path that is environmentally sustainable by increasing the resource productivity by 80% in various sectors in the industrialized regions, while being economically more profitable and balancing quality of life priorities. For developing regions, their development path could consequently take place in a much less resource inefficient way than for industrialized regions in the past.

In "The Forum", the role co-innovation for Digital Ecosystems and SEED (Social, Economic and Environmental Development) will be reflected from key initiatives and approaches worldwide, with the ambitious change levels outlined by Ernst Ulrich von Weizsäcker in mind. [8]

[1] Chang, E. Hussain F.K.: "Digital Ecosystems and Technologies", Edited Conference Publications (IEEE Inauguration Conference DEST 2007, IEEE Press, 2007.

[2] Sustainable Stanford, http://sustainablestanford.stanford.edu/, [June 27, 2013]

[3] Wood Institute for the Environment, http://woods.stanford.edu/ [June 27, 2013]

[4] iFOSSF, http://www.ifossf.org/, [June 27, 2013]

[5] The Report of the Brundtland CommissionBrundtland: "Our Common Future", UN Commission on Environment and Development, Oxford Press, 1987.

[6] Randers, Jorgen , "2052 – A Global Forercast for the Next 40 Years. A Report to the Club of Rome Commemorating the 40th Anniversary of The Limits to Growth", Chelsea Green Publishing, 2012.

[7] Weizsäcker von E. et al.: Factor Five: Transforming the Global Economy through 80 % Improvements in Resource Productivity, Published with The Natural Edge Project, Routledge Publishing, 2009.

[8] Karduck, A.P.: "Digital Ecosystems and SEED – Co-Innovation in Education", IEEE DEST 2013, July 24-26, Menlo Park, 2013.

2) Participants

The initial keynote presentation of Sinan Tumer - Senior Director SAP Co-Innovation Lab, USA – on *"***SAP Co-Innovation, Envision the Future, Crossroots Innovation****"* will introduce the context for The Forum.

Welcome and outline of "The Innovation Forum 2013 @ Silicon Valley"

Professor Achim P. Karduck,

Furtwangen University, Germany

Distinguished International Co-Innovation Keynote

O. Sinan Tumer
Senior Director SAP Co-Innovation Lab
USA

SAP Co-Innovation, Envision the Future, Crossroots Innovation

Silicon Valley Co-Innovation Keynote

Daniela Patrick, Innovation
Lead, AT&T Foundry, Palo Alto, USA

Technology Innovation for Networkes Life

Distinguished Participants at the Innovation Forum 2013 @ Silicon Valley

Professor Elizabeth Chang
Curtin University Australia
Berkeley University, USA

Professor Elizabeth Chang has 26 years of work experience in both Academia and Industry. She has been a full Professor in IT and Software Engineering for 10 years at Curtin University; in commercial corporations for 8 years (5 years as senior practitioner and 3 years as joiner engineer), typically working on commercial grade software development; and early in her career, 8 years were devoted to teaching and research in software engineering and computer science. Lately, she is a visiting scholar at UC Berkeley, and focuses on mobile software innovation, big data science and cloud computing.

As a Professor, she has obtained 20 Competitive Research Grants including 10 Australian Research Council (ARC) Grants worth over $11.5 million, as chief investigator and in collaboration with industry partners and colleagues, and all of them are related to intelligent data and information management and innovative software technologies, and its application to health, energy, transportation, education and business. She has supervised and co-supervised 34 PhD theses to completion.

She has a track record in establishing and consolidating large teams and research centres with minimal resources. In 2006 as Founding Director, she established a research body from scratch with a cohort of up 100 PhD students, this include 60+ enrolled PhD students, 40+ approved PhD students and 16 Post-doc fellows, for Curtin's Tier 1 Research Institute of Excellence on *Digital Ecosystems and Business Intelligence;* and to date, the Institute has graduated over 40 PhD students. She has also been the Founding Director of the University *Centre of Excellence on Extended Enterprises and Business Intelligence* since 2004, and Founding Director of the *University Centre for IT Applications and Logistics Informatics* at the University of Newcastle in 2001. She is also an ADCOM member of the IEEE Industrial Electronic Society and has been Co-chair of the IEEE IES Technical Committee on Industrial Informatics since 2005.

Dr. Michael W. Condry

Intel
Senior Security Technologies Strategist
San Jose, USA

Michael Condry received his PhD in 1980 from Yale University in Computer Science, then taught operating systems and compilers at Princeton University for 3 years. Michael moved to (then part of AT&T) Microprocessor group and worked on several Unix projects, both research and development, including real-time UNIX and 3 releases of UNIX/VME. After this he headed a research group in UNIX Systems Administration at Bell Labs. Michael then moved on to the Computer Science faculty at the University of Illinois where he directed a

strategic research team to study impacts of extremely fast networks on applications and their operational environments.

Michael, then in 1992 moved to Sun Microsystems heading up Open Systems Architecture and Standards group. This work started as technology to for software development processes to develop software architectures within Sun consistently. His responsibilities later expanded to include Solaris standards. He served as Sun's Board of Directors representative to The Open Group and he represented Sun on ANSI CMCEC board. Michael headed up the standards Internet effort and chaired the group to define a new web proxy technology that allows for services to be created "at the edge" of the Interent. This architecture is one of the new technologies to support content management on the Web.

Michael moved to Intel. He started in Intel Labs as the Director of Content Delivery Systems Research focusing on the new ways the Internet is evolving and what products can be created to support this evolution. After a few other roles with networking products Michael moved to the main line product area, namely client chips their architecture, customer needs, with a focus on security technologies particularly with firmware. Now Michael leads the Security Enablement Technologies for Intel Client Security capabilities.

Michael is senior member the IEEE and he is a Senior member on the Industrial Electronics Society (IES) Administration Committee. Michael created and runs the Industry Forum (www.iesforum.com) for IES a program to bridge between industry and research in the IEEE. He also is on the IEEE CCP that makes policy recommendations to congress. He co-chairs the standards committee and previously was IES board member for the IEEE Technology Management Council.

Professor Ernesto Damiani
University of Milan, Italy

Professor Ernesto Damiani is a full professor at the department of information technology of the University of Milan, Italy. He has held visiting positions at several international institutions, including George Mason University (USA), and is an adjunct professor at Curtin University, (Australia). Prof. Damiani coordinates several research projects funded by the Italian ministry of research, the European commission and by a number of private companies including CISCO, ST Microelectronics, Siemens Mobile and BT. His research interests include knowledge extraction and metadata design, advanced software architectures and soft computing. On these topics he has filed international patents and published more than 200 refereed papers in international journals and conferences. Ernesto Damiani is the vice-chair of the ifip wg on web semantics (wg 2.12) and the secretary of the ifip wg on open source systems (wg 2.13). In 2000, he was the recipient of acm sigapp outstanding service award.

Jenny Huang
Strategic Standards, AT&T Inc.
Director of Research, iFOSSF.org

Jenny works in the CTO office of Strategic Standards at AT&T Services Inc., responsible for setting the policies of AT&T's influence and adoption of critical IT, Business and Service Management standards that unite next-generation infrastructure and next-generation operations and business practices to facilitate the creation and expansion of new services.

Jenny has been active and holds leadership roles in several of the industry fora and international standards bodies since 2000. She is a distinguished fellow of the TM Forum, and was instrumental in the creation of several TM Forum strategic programs that focused on the OSS/BSS evolution to enable service providers to compete effectively in the Digital Service marketplace. She currently leads the Service Provider Leadership Council and Cloud SLA Management team within the TM Forum, she is also the chair of Telecom PSIG at the Object Management Group.

With extensive experience working side by side with industry's top talents, Jenny is also interested in developing her knowledge and influence at the grassroots level. She firmly believes that the solutions to humanity's most pressing issues require global interventions that harness good ideas from the grassroots level and effectively transform them into practical solutions. Since 2006, Jenny has served as a volunteer and Director of the International Free and Open Source Solutions Foundation (iFOSSF), along with other Sustainable Development related research projects. Jenny assists these organizations to create the processes and technologies that enable people to make educated choices regarding public investments and channel market forces to support novel ideas with measurable results.

Jenny holds a Bachelor degree in Economics and a Master degree in Computer Science, she is uniquely suited to support her interests and mission by her hands-on experiences in software engineering and business strategy development.

Professor Liu Jie

Fudan University

Business School, Information Systems

Shanghai, China

Professor Liu Jie is a Professor at School of Management, Fudan University. He also is a part-time Professor of School of Economics and Management of Tongji University, and Honorary Professor of the Faculty of Business and Economics of Hong Kong University. Prior to that, he was Director of MBA Program, and Director of Department of Management Science and Engineering, Tongji University. From 1995 through 1998 he worked in TJST (listed company 600846) as executive Vice General Manager. In 2001, he worked as a senior visiting scholar at ENPC in Paris for six months, sponsored by China Scholarship Council.

Dr. LIU Jie's teaching, research and consulting interests are in Management Information Systems (MIS) and Electronic Commerce (EC). He has published three books in Beijing, and over fifty articles in leading journals and conference proceedings.

Professor Christian Wagner
City University Hong Kong
School of Creative Media / Information Systems

Christian Wagner is Professor of Information Systems at City University's Information Systems Department. He received his Ph.D. in Business Administration from the University of British Columbia in 1989. Thereafter he spent seven years as a faculty member at the University of Southern California, before joining City University in January 1996. Wagner specializes in the development and study of decision support systems, creativity support, and knowledge management with wikis and weblogs.

He is Professor Associate Provost (Quality Assurance) of City University Hong Kong, and Associate Dean of the School of Creative Media.

O. Sinan Tumer

Senior Director SAP Labs Inc., USA

Sinan Tumer is the Senior Director of the new SAP Labs Inc. (USA) and Head SAP International Research Policy. He is responsible for managing international research policies at SAP Research, with special emphasis on innovation deployment and adoption programs.

He is assessing various instruments from the European Commission and US Federal Government for collaborations with the Public Sector, like pre-commercial public procurement (PCP), technology procurement (TP) and public procurement of innovation (PPI).

Previously as the Director of Operations at SAP Research, he was responsible for operations of SAP Research centers around the globe. As part of his responsibilities, his research Project Management Office (PMO) established and maintained end-to-end research processes to provide consistent approaches among research projects, which included research projects management infrastructure, assessment of operational risks and development of methods in managing publicly co-funded research projects.

Sinan joined SAP in 1991at SAP America in Philadelphia. Before transferring to SAP's global research senior management team in 2000, he held various management positions at SAP America as the Consulting Director of the North East region of USA and as the Partner Alliance Director. Prior to his career at SAP, he had held various IT management positions, eight years as Systems Integration consulting at Andersen Consulting and Price Waterhouse, as well as Information Systems management positions at leading consumer products companies Sunmark, subsidiary of Nestle, and Ralston Purina in St. Louis Missouri for six years.

Sinan holds Masters degree in Systems Engineering and Master of Science degree in Computer Sciences, both from Georgia Institute of Technology, Atlanta Georgia USA.

Professor Achim P. Karduck
Furtwangen University, Germany

Achim P. Karduck is a Professor for Telematics and Software Architecture at Furtwangen University, Germany. His research activities are in the area of Collaborative Systems, Digital Ecosystems, Innovation Adoption Strategies, and SEED (Social, Economic, and Environmental Development). Often, the research is being done in conjunction with industrial partners and international research centers (such as Daimler Research, SAP Research, Singapore Internet Research Center). He has lectured and researched internationally at Tongji-University Shanghai (China), Universidade Federal de Santa Catarina (Brazil), and the Grand Ecole EMAC (Albi, France). In 2009, Achim P. Karduck has been appointed Adjunct Professor at Curtin University of Technology (Perth, Australia).

He has strongly involved in the of IEEE DEST (International Conference on Digital Ecosystems and Technologies) conference series. In 2013, he serves as General Co-Chair of IEEE DEST 2013 in Palo Alto (USA), for DEST 2011 in Campione (Italy) and DEST 2010 in Dubai (UAE), and as Co-Chair for the newly introduced Innovation Adoption Forum with SAP.

Achim P. Karduck holds a Diplom degree in Computer Science (comparable to B.Sc. Hons.) from Furtwangen University (Germany), a Master of Science degree in Man-Computer Systems from DeMontfort University (UK), and a Ph.D. in Telematics from Freiburg University (Germany).

Before his University career, he headed the Innovation Department for New IS of Swiss Bank Corporation in Basel, Switzerland. Subsequently, he was appointed head of UBS Private Banking New Technologies US in New York, USA.