

Guest Editor's Introduction

Security and Privacy of Online Technologies

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Online Technology has become a primary medium for accessing information for businesses and individuals to enhance job performance and performing, on other hand, the online technology can cause severe damages from privacy, security and reputation. Furthermore, this online technology platform is unrestricted for a specific audience; any business that has the on-line access has the right to upload/download information from the web. The online technology should be developed to match users and business's requirements, since the majority of websites are designed in a way to reduce user frustration, but some are still missing the basic aspects for developing websites efficiently. This special journal issue aims to examine the risks and opportunities of online technology for businesses, as well as to if the web development process is mandatory to Businesses locally and globally.

This special issue of Pacific Asia Journal of the Association for Information Systems (PAJAIS); entitled Online Technology and Security: An International Perspective comprises four papers that provide cutting edge information and knowledge of technology, privacy, security and reputation in business. The guest editors selected these papers from the Internet Technologies and Society 2014, which was held in in Taiwan (<http://its-conf.org/>). The papers have been extended significantly and peer-reviewed further to achieve a final high publication standard.

The first paper is entitled "Innovative approaches and solutions to understand, identify and tackle social media crime" by Bernhard Jäger, Peter Leitner. This paper discussed the dramatic rise of social media sites like Facebook, Twitter and YouTube in the last decade have also led to a marked increase in criminal activities and offences in such interactive spaces. These so called social media crimes include a wide range of phenomena such as spamming and defrauding thousands of people or arranging sexual contacts with minors. The authors of this paper developed a classification scheme based upon four clusters: Social Hacking, Social Scamming, Social Insulting and Social Agitating. Built upon and supported by an extensive analysis a framework was built which allows to group particular phenomena and built the mentioned clusters in a comprehensible way. Resulting from this classification scheme this paper elaborates further on a) how social media is mainly used within a particular crime phenomenon and b) prevention and identification strategies for social media crime.

The second contribution is entitled “The Dalit I Define: Social Media and Individualized Activism in Subaltern Spheres” by Johannes G. de Kruijf. This paper discusses an explorative study of emerging Dalit activism in online realms. It is the aim of this study to provide empirical content to debates that link the advance of social media to shifts in citizenship and the manifestation of democracy. It seeks to unravel the complexity and hybrid appearance of online activism in practice by focussing on underexplored subaltern spheres. After some contextualizing reflections concerning literature on Dalit media and online political participation, it assesses attempts of prominent Dalit bloggers to employ social media in their battle for justice, representation and socio-economic mobility. Contributing to current debates on collective (and connective) action and ‘new’ or personalized politics – especially since Web 2.0 – the article stresses the importance of embracing a broad conceptualization of online political practice and the need to explore such practice as part of contemporary projects of self. It is argued that, in order to explore the dynamics of personalized politics within marginalized communities, one needs to assess the way in which the intertwinement of these individual projects of self and the collective emancipatory project appear in online social networking strategies of digital activists. As such, the analysis adds to the understanding of every day activism at grassroots level in the age of the Internet.

The third contribution is entitled “Privacy-preserving design of data processing systems in the public transport context” by Franco Callegati, Aldo Campi, Andrea Melis, Marco Prandini, and Bendert Zevenbergen. The public transport network of a region inhabited by more than 4 million people is run by a complex interplay of public and private actors. Large amounts of data are generated by travellers, buying and using various forms of tickets and passes. Analysing the data is of paramount importance for the governance and sustainability of the system. This manuscript reports the early results of the privacy analysis which is being undertaken as part of the analysis of the clearing process in the Emilia-Romagna region, in Italy, which will compute the compensations for tickets bought from one operator and used with another. In the manuscript it is shown by means of examples that the clearing data may be used to violate various privacy aspects regarding users, as well as (technically equivalent) trade secrets regarding operators. The ensuing discussion has a twofold goal. First, it shows that after researching possible existing solutions, both by reviewing the literature on general privacy-preserving techniques, and by analysing similar scenarios that are being discussed in various cities across the world, the former are found exhibiting structural effectiveness deficiencies, while the latter are found of limited applicability, typically involving less demanding requirements. Second, it traces a research path towards a more effective approach to privacy-preserving data management in the specific context of public transport, both by refinement of current sanitization techniques and by application of the privacy by design approach.

The last contribution, entitled “Overview of data security issues in Hospital Information Systems” by Maslin Masrom and Ailar Rahimly. Nowadays, hospital information systems (HIS) provide real-time data and information in order to guide public health organizations especially in decision-making. The hospital information systems are integrated information systems designed to manage the administrative, financial, and clinical tasks or aspects of a hospital. It plays an important role in planning, initiating, organizing, and controlling the operations of the hospital, and a crucial role in providing quality healthcare services. The aims of this paper are to explore and provide a better understanding of data security aspects in hospital information systems, and add more body of knowledge in information systems (IS) field in the healthcare industry. The views of previous researches are presented and discussed, and new area of interest to the IS and HIS community then are proposed.

About Guest Editors

Tomayess Issa is a senior lecturer at the School of Information Systems at Curtin University, Australia. Tomayess has held a number of leadership positions encompassing curriculum leadership - leading teams of tutors and instructors as well as leading various research teams. Tomayess completed her doctoral research in Web development and Human Factors. As a university teacher, she is interested in establishing teaching methods and styles to enhance students' learning experiences and resolve problems that students face. Currently, she conducts research locally and globally in information systems, Human-Computer Interaction, Usability, Social Networking, Teaching and Learning, Sustainability, Green IT and Cloud Computing. She is a Project leader in the International research network (IRNet-EU) designed to study and develop new tools and methods for advanced pedagogical science in the field of ICT instruments, e-learning and intercultural competences and she is a senior research member of ISRLab (Information Society Research Lab) from International Association for Development of the Information Society.

Dr. Piet Kommers is an early pioneer in media for cognitive- and social support. His doctoral research explored methods for hypertext and concept mapping in learning. Since 1982 he developed educational technology as an engineering approach for learning and teaching. His main thesis is that technology is catalytic for human ambition and awareness. His main function is associate professor in the University in Twente, The Netherlands and adjunct/visiting professor in various countries. He taught more than fifteen bachelor-, master- and PhD courses and supervised more than 30 PhD students. He instigated and coordinated the NATO Advanced Research Workshop on Cognitive Technologies in 1990 and a large series of Joint European Research Projects in: authoring multimedia, web-based learning, teacher education, virtual 3d worlds, constructivist learning, social media, web-based communities and international student exchange. UNESCO awarded his work in ICT for Education in Eastern Europe with the title of Honorary Professor. The Capital Normal University in Beijing awarded his work with the title of Honorary Doctor. He is member of advisory boards in ministries of education and academia of sciences in Singapore, Finland and Russia. Piet Kommers is the initiator of the international journal for web-based communities and overall chair of the IADIS conferences on societal applications of ICT. Since the late nineties he gave more than 40 invited and keynote lectures at main conferences in the fields of education, media and communication. His books and journal articles address the social and intellectual transformations at each transition from "traditional" into the "new" media. Instead of regarding media as extrapolating, supplanting, vicarious or even disruptive, Piet's view is that new media elicit and seduce both individuals and organisations to reconsider human nature and challenge existential awareness at that very moment.

Pedro Isaias is an Associate professor at the Universidade Aberta (Portuguese Open University) in Lisbon, Portugal, responsible for several courses and director of the master degree program in Electronic Commerce and Internet since its start in 2003 until 2014. He is the Master of Management/MBA director since 2014. He is cofounder and president of IADIS, a scientific non-profit association. He holds a PhD in Information Management (in the speciality of information and decision systems) from the New University of Lisbon. Author of several books, papers and research reports in the information systems area, he has chaired several conferences and workshops within the mentioned area. He is also member of the editorial board of several journals and program committee member of several conferences and workshops. He has been responsible for the scientific coordination of several EU funded projects such as CHILIAS, VERITY AND LIBERATOR from previous EU frameworks. He is currently involved in the EU research project "Empathic Products" and also in a COST action FP1104: New possibilities for print media and packaging – combining print with digital. Presently he conducts research activity related to Information Systems in general, E-Learning, E-Commerce and WWW related areas.