

SMC 2016

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<http://www.smc2016.org/>

SMC_2016 Workshop Call for Papers
**Big Data based Technological Innovations on
Intelligent Health Service in the Clouds**
http://www.somet.soft.iwate-pu.ac.jp/SMC2016_healthWS

Workshop organizers

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Introduction/Call for Papers

Big Data technology is new challenges to create human profiles, monitor social behavior, provide decision support based on social trends or discover new service providing opportunities. The objective of this workshop is to highlight new research directions in providing healthcare services granules represented in Cloud Semantics based on IoP (internet of People) preferences. The IoP cloud will provide ordered preference on people in connection to health needs and crisis services. These two services are represented as knowledge-based systems in IoH (internet of Health) in cloud semantics, and also internet of Crisis (IoC) in another cloud. These collaborative clouds provide health services to user (specially the elderly) based on semantical analysis in relation to their preferences. System handles these situational (different scenarios) predictions for diagnosis and healthcare services. We discuss what kind of problems and solutions tackling such technologies. We discuss the physical and mental features surroundings elderly situations and representing all as a set of criteria for decision making. We also discuss on-shelf robots like Nao and Pepper to be used for handling homecare transaction for elderly as application domain. We discuss multi-modal sensing to collect physical data on elderly, transfer the data to the cloud, for reasoning and prediction, and then provide mechanism scenario that download to on-shelf robot that can handle help tasks for the elderly. We discuss knowledge-based systems, data mining techniques, multi-dimensional feature extraction on multi-data stream. **The best papers from this workshop will be invited for extended version as journal article for special issue in [Knowledge-Based Systems Journal](#) on the topic on these of the workshop.**

Indicative Topics/Areas

Aspects that are to be discussed in this workshop are:

- Cooperative clouds, policies and securities
- Sentimental analysis prediction and subjective criteria of IoP, user preferences extracted from Social Network
- Trust based decision making models and consensus processes in Social Media exploiting the preferences and opinions and data from social networks.
- Recommender systems in social contexts.
- Structure of the cloud based big data context and the most representative crisis evaluation decision
- Data source clustering schemes or classification of data sources by attributes
- Feature extraction for medical multidimensional data streams in the clouds.
- Health predictions based on non-linear data analysis, (Epilepsy prediction, heart diseases, aging-associated sickness and diseases, etc.)
- Emotion space model for sentiment classification in social media on health informatics
- Structured sentiment classification via social context regularization on health informatics
- Automatic FAQ generation from social media content support on health informatics
- Sentiment Analysis of multiple language tweets related to health informatics
- Data Mining for medical diagnosis
- Model based health care for elderly and ICT robotics for health care.

Important Dates

April 15, 2016: Deadline for submission of full-length papers

May 25, 2016: Acceptance/Rejection Notification.

July 9, 2016: Final camera-ready papers due in electronic form.

Submission

Manuscripts for a Workshop should **NOT** be submitted in duplication to any other regular or special sessions and should be submitted to SMC2016 main conference online submission system on SMC2016 conference website.

All submitted papers of the workshop have to undergo the same review process (three completed reviews per paper). The technical reviewers for each paper will be members of the SMC2016 Program Committee and qualified peer-reviewers to be nominated by the workshop organizers.

The web site of the workshop:

http://www.somet.soft.iwate-pu.ac.jp/SMC2016_healthWS

Speaker Bios:

[Hamido Fujita](#) is Professor at Iwate Prefectural University (IPU), Iwate, Japan, and director of Intelligent Software Systems. He is the Editor-in-Chief of Knowledge-Based Systems, an Elsevier journal of high impact factor (4.104). He received the Doctor Honoris Causa from Óbuda University in 2013, and the title of Honorary Professor from Óbuda University, Budapest, Hungary in 2011. He received the Honorary Professorship from many distinguished universities. He is an Adjunct professor to Stockholm University, Sweden, University of Technology Sydney, National Taiwan Ocean University and others. He has supervised PhD students jointly with the University of Laval, Quebec, Canada; University of Technology, Sydney, Australia; University of Paris 1 Pantheon-Sorbonne, France, University of Genoa, Italy, and others. He led a number of projects including Intelligent HCI, a project related to Mental Cloning as an intelligent user interface between human users and computers and the SCOPE project on Virtual Doctor Systems for medical applications.

[Enrique Herrera-Viedma](#) received the B.Sc. and Ph.D. degrees in Computer Sciences, from the University of Granada (Spain) in 1993 and 1996, respectively. He is currently Vice-President for Research and Knowledge Transfer of University of Granada, and Professor with the Department of Computer Science and Artificial Intelligence at the University of Granada, Vice-Dean of Research in Library and Communication Faculty, and Director of the Quality Evaluation and Information Retrieval Research Laboratory (SECABA). He is an Associate Editor of several ISI journals: IEEE Transaction on Systems, Man, and Cybernetics: Systems; Knowledge Based Systems; Applied Soft Computing, Soft Computing; Journal of Intelligent Fuzzy Systems; Fuzzy Optimization and Decision Making, and Information Science. He has published extensively in leading international journals in this field more than 110 papers in ISI journals. His H-index is 41 and he presents more than 5500 citations in Web of Science. In 2014 he has been identified by Thomson Reuters and Shanghai Ranking Center as a Highly Cited Researcher.

[Ali Selamat:](#) has received a B.Sc. (Hons.) in IT from Teesside University, U.K. and M.Sc. in Distributed Multimedia Interactive Systems from Lancaster University, U.K. in 1997 and 1998, respectively. He has received a Dr. Eng. degree from Osaka Prefecture University, Japan in 2003. Currently, he is the Director, Center of Communication and Information Technologies (CICT), UTM. He is also a professor at the Software Engineering Department, Faculty of Computing UTM. Previously he was an IT Manager at School of Graduate Studies (SPS), UTM. He is the editors of International Journal of Digital Content Technology and its Applications (JDCTA), International Journal of Advancements in Computing Technology (IJACT) and International Journal of Intelligent, Information and Database Systems (IJIIDS). His research interests include software engineering, software agents, web engineering, information retrievals, pattern recognitions, genetic algorithms, neural networks and soft-computing.

[Amedeo Cesta](#) is a senior research scientist in Artificial Intelligence at CNR and Group Lead at ISTC. He has founded and currently coordinates activities of the Laboratory on Planning and Scheduling Technologies (PST). He has conducted research in several AI areas like Multi-Agent Systems, Intelligent Human-Computer Interaction, Planning & Scheduling and always pursued the synthesis of innovative Decision Support Systems. His work focuses on the integration of planning and scheduling in software architectures, the use of constraint programming for specialized tasks such as temporal and resource reasoning, the synthesis of planning and scheduling heuristics, the interactive solution of complex planning and scheduling problems. His work in Artificial Intelligence also emphasizes the real-world aspects of

automated reasoning, in particular focusing on research topics like robust and flexible problem solving, execution monitoring and mixed-initiative interactive systems. He is currently exploring the integration of planning and scheduling techniques in new applicative areas (e.g., crisis managers training) and the synthesis of new cognitive aids for old people by integrating ICTs and robotics.

Potential contributors:

Professor Dr. Rajendra Udyavara Acharya, Ngee Ann Polytechnic, Singapore

Professor Dr. Filippo Molinari, Politecnico Di Torino, Italy

Professor Dr. Tun-Wen Pai, National Taiwan Ocean University, Taiwan

And others