

(SAME) – In Conjunction with AmI-2010

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Abstract. The SAME workshop takes place for the 3rd time in 2010, and it's theme in this year was *creating the business value-creation, vision, media theories and technology for ambient media*. SAME differs from other workshops due to its interactive and creative touch and going beyond simple powerpoint presentations. Several results will be published by AMEA – the AMbient Media Association (www.ambientmediaassociation.org).

Keywords: ambient intelligence, ubiquitous computation, pervasive computation, pervasive e-commerce, media studies, ambient health.

1 Workshop Description¹

The medium is the message! And the message was transmitted via a single distinguishable media such as television, the Web, the radio, or books. In the age of ubiquitous and pervasive computation, where the information through a distributed interlinked network of devices the question, “what is content in the age of ambient media?” becomes more and more of importance. Ambient media are embedded throughout the natural environment of the consumer – in his home, in his car, in restaurants, and on his mobile device. Predominant example services are smart wallpapers in homes, location based services, RFID based entertainment services for children, or intelligent homes. The distribution of the medium throughout the natural environment implies a paradigm change of how to think about content. Until recently, content was identified as single entities to information – a video stream, audio stream, TV broadcast. However, in the age of ambient media, the notion of content extends from the single entity thinking towards a plethora of sensor networks, smart devices,

¹ As the workshop takes place frequently, and the workshop description has been excerpted and been overtaken in parts from previous year's workshop descriptions or publications, as its content remains the same (see e.g. [2], [3] and [4]).

personalized services, and media embedded in the natural environment of the user. The user actively participates and co-designs media experience with his location based input. Initiatives as the smart Web considering location based tagging for web-pages underline this development. This multidisciplinary workshop aims to answer to the challenges how to select, compose, and generate ambient content; how to present ambient content?; how to re-use ambient content and learning experiences?; what is the characteristics of ambient media, its content, and technology?; and what are ambient media in terms of story-telling and art? And finally, how do ambient media create business and value? How can ambient media be integrated into business processes and strategies? Semantics plays a crucial role in the generation of ambient media content. It can be seen as the glue between the raw data and the ambient media. Therefore we are interested to see innovative ideas how data can be (semi-automatically) be interpreted and translated into media presentations. The workshop aims at a series, and at the creation of a think-tank of creative thinkers coming from technology, art, human-computer interaction, and social sciences, that are interested in glimpsing the future of semantic ambient intelligent empowered media technology.

2 Topics and Themes

The following (and related) topics are within the scope of this workshop and shall act as examples: Supply chain management with ubiquitous computation; eCommerce & ubiquitous commerce; Business processes, value-creation, and opportunities of ambient media; Understanding of the semantics of ambient content and methods for adding intelligence to daily objects; Mobile and stationary sensor data collection and interpretation algorithms and techniques; Context awareness and collection and context aware composition/selection of ambient content; Creation and maintenance of meta-information including metadata and data management; Ambient and mobile social networks, user generated content, and co-creation of content and products; Characteristics of ambient media, its content, and technological platforms; Ambient content creation techniques, asset management, and programming ambient media; Algorithms and techniques for sensor data interpretation and semantic interpretation; Applications and services, including ambient games, art and leisure content in specific contexts; Ambient interactive storytelling, narrations, and interactive advertising; Personalization, user models, multimodal interaction, smart user interfaces, and universal access; Experience design, usability, audience research, ethnography, user studies, and interface design; Business models, marketing studies, media economics, and 'x'-commerce of semantic ambient media; Ambient interfaces (touch, gesture, haptics, biometrics); Management of information, knowledge and sapience in the context of semantic ambient media; Methods for context awareness, sensor networks, and sensor data mining; Semantic data mining and text mining for pervasive media; Semantic models, semantic interpretation for ambient media presentation; Personalization and methods for locative media.

3 Workshop Organizers

Artur Lugmayr, Tampere University of Technology (TUT) & lugYmedia Inc., FINLAND. Prof. Dr. Artur Lugmayr describes himself as a creative thinker and his

scientific work is situated between art and science. Starting from 1st July 2009 he is full-professor for entertainment and media production management at the department for industrial management at the Tampere University of Technology (TUT). His vision can be expressed as to create media experiences on future emerging media technology platforms. He is the head and founder of the New AMBient MULTimedia (NAMU) research group at the Tampere University of Technology (Finland) which is part of the Finnish Academy Centre of Excellence of Signal Processing from 2006 to 2011 (<http://namu.cs.tut.fi>). He is holding a Dr.-Techn. degree from the Tampere University of Technology (TUT, Finland), and is currently engaged in Dr.-Arts studies at the School of Motion Pictures, TV and Production Design (UIAH, Helsinki). He chaired the ISO/IEC ad-hoc group "MPEG-21 in broadcasting"; won the NOKIA Award of 2003 with the text book "Digital interactive TV and Metadata" published by Springer-Verlag in 2004; representative of the Swan Lake Moving Image & Music Award (<http://www.swan-lake-award.org/>); board member of MindTrek (<http://www.mindtrek.org>), EU project proposal reviewer; invited key-note speaker for conferences; organizer and reviewer of several conferences; and has contributed one book chapter and written over 25 scientific publications. His passion in private life is to be a notorious digital film-maker. He is founder of the production company LugYmedia Inc. (<http://www.lugy-media.tv>). More about him on Google.

Björn Stockleben, RBB, GERMANY. Björn Stockleben was awarded his master's degree in Media Sciences, Media Technology and Computer Sciences from Technical University of Brunswick and Brunswick School of Arts in 2003. As a student research assistant he worked on MHP applications for the CONFLUENT and Multimedia Car Platform (MCP) project. He wrote his master thesis on ergonomic and content-specific constraints of video on mobile devices. Since April 2004 Björn Stockleben has been employed by Rundfunk Berlin-Brandenburg as project engineer for its Innovation Projects. Currently he is working on user generated content and citizen journalism for the news and youth radio departments of RBB.

Juha Kaario, Varaani Oy, FINLAND. Juha Kaario, MSc, was a Principal Member of Engineering Staff at the Nokia Research Center. He joined Nokia Mobile Phones marketing department in 1995 and moved to Nokia Research in 1997. In Nokia research Center he has worked ten years as a research manager and senior research manager for several teams including Wearable Computing (1998-2002), Personal Content (2002-2003) and Mobile Games (2003-2007). Previously he has worked in the University of Tampere (1993-94), in the Technical Research Center of Finland (1992-93) and as a co-owner in a small enterprise (1993-1996). He is one of the originators of the the Multi-User Publishing Environment (MUPE) application platform. His interest is in multi-discipline research for personal content, pervasive computing and mobile services. He is currently working with his new startup company Varaany Oy in Finland.

Bogdan Pogorelc, Ljubljana University, SLOVENIA. Bogdan Pogorelc is a Ph.D. candidate and a Research Assistant at Department of Intelligent Systems at Jožef Stefan Institute (JSI) in Ljubljana, Slovenia. Since 2008 he has been employed at Jožef Stefan Institute and Špica International d.o.o. for which he obtained the "Young

Researcher” fellowship. Bogdan was visiting researcher at University “Rovira i Virgili” in Tarragona (Spain) in 2007, where he performed research on “Fuzzy Artmap neural network for assessment of metabolic syndrome”. He received several awards for his research: e.g., 1st Prize at Slovenian forum of innovations for “*Intelligent security system for the surveillance of buildings*” in 2009 and awards of i) National Instruments and ii) University of Maribor for “*Mobile electrocardiograph*” in 2006. Bogdan’s research interests include artificial intelligence, machine learning, (temporal-/time series-) data mining as well as applications in these areas, especially medical informatics and ambient intelligence. His main research interest is “*Behavior recognition from motion capture systems using data mining*, such as “*Automatic recognition of gait-related health problems of elderly*” or “*Automatic management of (physical) rehabilitation process for (neurologically) impaired people*”.

Thomas Risse, L3S Research Center, GERMANY. Thomas Risse works as a senior researcher at the L3S Research Center in Hannover. He received a PhD in Computer Science from the Darmstadt University of Technology, Germany in 2006. Before he joined the L3S Research Center in 2007 he lead a research group about intelligent information environments at Fraunhofer IPSI, Darmstadt. He worked in several European and industrial projects. He was the technical director of the European funded integrated project BRICKS, which aim was to build a decentralized infrastructure for distributed digital libraries. Currently he his the deputy manager of the FP7 Living Web Archive (LiWA) project. Thomas Risse's research interests are semantic evolution, data management in distributed systems, federated search, and self-organizing systems. He serves regularly as program committee member or project reviewer. He published several papers at the relevant international conferences.

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