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## **D9.6**

# **Dissemination Report and Updated Plan v2**

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## **Dementia Ambient Care: Multi-Sensing Monitoring for Intelligent Remote Management and Decision Support**

**Dem@Care - FP7-288199**

## Deliverable Information

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<b>Abstract (for dissemination)</b>		This deliverable presents the second Dem@Care dissemination report. Dem@Care as a multi-disciplinary, multi-partner research endeavour aspires to contribute to the independence of people with dementia. The social, economical and research dimensions of the Dem@Care project make dissemination activities of paramount importance. The second year of the project has seen a marked increase in academic dissemination, which is in accordance with the original dissemination plan. This year has also seen some significant work in the planning and hosting of, and participation in physical, face-to-face events. Individual partner-level activities are also explained within the document.

## Version Log

Version	Date	Change	Author
v01	13/9/2013	Initial Template with Table of Contents	Eamonn Newman (DCU)
v02	27/9/2013	New sections, comments and to-do's	Ceyhun Burak Akgül (VIV)
v03	04/10/2013	Some edits to partner summaries; new section on ICT Exhibition from Alexia	Eamonn Newman (DCU)
v04	22/10/2013	Dissemination activity tables for Year 2 added to appendix. Updates to summary table. Some partner summary edits.	Eamonn Newman (DCU)
v05	23/10/2013	Web presence and summer school parts updated. Several edits in different places.	Ceyhun Burak Akgül (VIV)
v06	25/10/2013	Amendment of partner summaries following input from group. General formatting checks, spelling and grammar checks.	Eamonn Newman (DCU)
v07	25/10/2013	Final reading and minor edits	Ceyhun Burak Akgül (VIV)
v08	29/10/2013	Post-review edits	Eamonn Newman (DCU), Ceyhun Burak Akgül
V09	11/11/2013	Add information about MIRRH	Yiannis Kompatsiaris (CERTH)

## Executive Summary

This deliverable presents the second Dem@Care dissemination report as well as planning updates with respect to previous dissemination plans presented in deliverables D9.2 and D9.3. Dem@Care as a multi-disciplinary, multi-partner research endeavour aspires to contribute to the independence of people with dementia. The social, economical and research dimensions of the Dem@Care project make dissemination activities of paramount importance. The second year of the project has seen consolidation of effort in areas of web activity, building upon the initial Year 1 efforts. As expected, academic activity has increased as the project has started to yield interesting experimental results. Individual partner-level activities are also explained within the document. The project partners have collaborated as a consortium in hosting a summer school with an integrated vision on information technologies and healthcare, and preparing to demonstrate the project prototype in EU ICT 2013 Exhibition.

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# 1 Introduction

In this document, we summarize Dem@Care dissemination activities during the second project year. The overall goal of the Dem@Care project is to provide an integrated remote care and management solution for people with dementia by bringing together leading experts in dementia, video and audio analysis, physiological sensor data monitoring, life-logging, lifestyle analysis, data mining and fusion, knowledge modelling and semantic inference. The Dem@Care project as a multi-disciplinary, multi-partner research endeavour aspires to contribute to the independence and autonomy of people with dementia. The social, economical and research dimensions of the Dem@Care project make dissemination activities of paramount importance for several reasons.

First and foremost, Dem@Care dissemination activities should address as many people as possible, at different levels (citizens, social stakeholders, local decision makers), to make them more aware of the complexities of the problems associated with ageing and of existing technologies, as well as of national and local strategies for tackling them.

Second, the success of Dem@Care will be largely relying on the acceptance of such a system by its potential users be they patients and their relatives, healthcare professionals or organizations. As such, the project should establish persistent connections for collaborating with relevant people and organizations to be engaged with the goals set by the Dem@Care project.

Third, the Dem@Care system components, which are in the process of maturing as a function of the technical progress of the project, should be promoted and advertised to key players in the healthcare industry, as well as to healthcare providers, who have an interest in remote management and care.

Finally, as a research project raising considerable expectations, Dem@Care is bound to deliver important scientific and technological outputs, which should be shared with academia and research organizations through academic dissemination channels in order to mobilize more and more ICT and medical researchers towards the research goals in remote healthcare and ICT-enabled healthy aging and independent living.

In the following two subsections, we provide an overview of the Dem@Care dissemination strategy as well as adopted planning and executions methods as presented in the deliverable D9.2 Initial Dissemination Plan. In Section 2, after presenting selected dissemination highlights according to dissemination media and methods, we summarize the second project year activities by evaluating collective dissemination statistics. Section 3 is devoted to individual partner activities during the first project year as well as planned publications for the upcoming year. Section 4 provides a conclusion. The details of the dissemination activities are presented in the Appendix.

## 1.1 Overview of Dissemination Strategy

Deliverable D9.2 presented the Dem@Care dissemination strategy by discussing several enabling factors for successful dissemination. We restate below the pillars of our dissemination strategy:

- Consciously aligning dissemination objectives with the overall project goals by careful selection and diversification of dissemination opportunities,

- Focusing on diverse target audiences,
- Phased dissemination,
- Diversification of dissemination media and methods,
- Effective planning and execution.

The overall goal of the Dem@Care project is supported by strategically designed dissemination activities in order to:

- *raise a general awareness within the society* on the socio-economic aspects of dementia, to *inform people affected by dementia* (both patients and relatives of people with dementia) *and the general public* (individuals, organizations, governmental bodies);
- *inform other medical and ICT researchers* from academia and the industry;
- *engage people and organizations* with the research results obtained throughout the project in order to get input and feedback;
- *promote the project among decision makers and enterprises in the medical domain as well as governmental bodies* by periodically showing useful, tangible, and promising research and technology outcomes of the project.

Specification of the target audiences is also important in that the expectations and interests can vary from group to group. Naturally, the right message should be given to the right audience. In this respect, the Dem@Care dissemination strategy is committed to systematically and continuously identify different individuals, groups and organisations, and their specific expectations, as well as to keep their interests alive throughout the project. This is achieved through active engagement in academic conferences and workshops, industry-facing exhibitions and significantly through personal contact between clinical researchers and PwDs (and their families) through clinic, personal and community group contacts.

The Dem@Care dissemination strategy sets objectives that change over time in synchrony with project milestones. This dissemination approach is in line with the three-stage research and development approach of the Dem@Care project, which will evolve and progress in terms of three system prototypes.

A wide variety of dissemination methods are leveraged during Dem@Care. Appropriate knowledge and skills are necessary to select the right one to communicate the message to the target audience and achieve the purpose of the dissemination strategy.

The last pillar on effective planning and execution is described in the following subsection.

## 1.2 Planning and Execution Methods

Thorough planning at the early phase of the project has helped to ensure the on-going success of the Dem@Care dissemination strategy.

By defining plans upfront in the 1<sup>st</sup> year, the partners were guided to strategically think on their individual dissemination activities as well as on planning their dissemination purposes and efforts in conjunction with the overall dissemination strategy. Each partner is responsible for the timely maintenance and updating of their individual dissemination tables, hosted on the project wiki. We also benefit from these tables to extract global statistics, also presented later in this deliverable, so that we can strategically reshape Dem@Care dissemination activities. This approach has been rigorously followed during the 2<sup>nd</sup> year as well.



Finally we note that, according to our phased dissemination strategy, Dem@Care activities are planned to follow the below pattern:

- Until 1<sup>st</sup> prototype (M20): Awareness-raising, partnering and informing activities,
- 1<sup>st</sup> prototype (M20) – 2<sup>nd</sup> prototype (M34): Informing and engagement activities,
- 2<sup>nd</sup> prototype (M34) – 3<sup>rd</sup> prototype (M48): Engagement and promotion activities.

As such, the first project year was largely devoted to raising awareness, developing collaborations and informing interested parties about the project. The second year of the project has seen the development and component-wise testing of the first prototype system. This has yielded a large number of academic publications, allowing for dissemination to a wide academic and industry audience, covering clinical, technical and ethical aspects of ambient-assisted living systems.

## 2 Year 2 Activities: Highlights and Collective Summary

### 2.1 Web Presence

In Dem@Care dissemination, we extensively use a web-based approach. The complete listing of Dem@Care web activities is provided in the Appendix A.1.

#### Project Websites

The Dem@Care website has been available at <http://www.demcare.eu/> since the start of the project; it is maintained and updated regularly during the lifetime of the project and will be available for at least 3 years after the end of the project, making information related to the Dem@Care project available to a wide audience. It is intended to provide an overview of the project's concept, vision and goals, to introduce the Dem@Care consortium, and serve as a gateway for discussing Dem@Care related issues. Expected outcomes deriving from the project work are also presented and public documents are available for downloading. In Figure 1, the website welcome page is shown. In addition to the official project website, each partner in the project either maintains their own web page for Dem@Care in their own language or provides a link to the official project website.

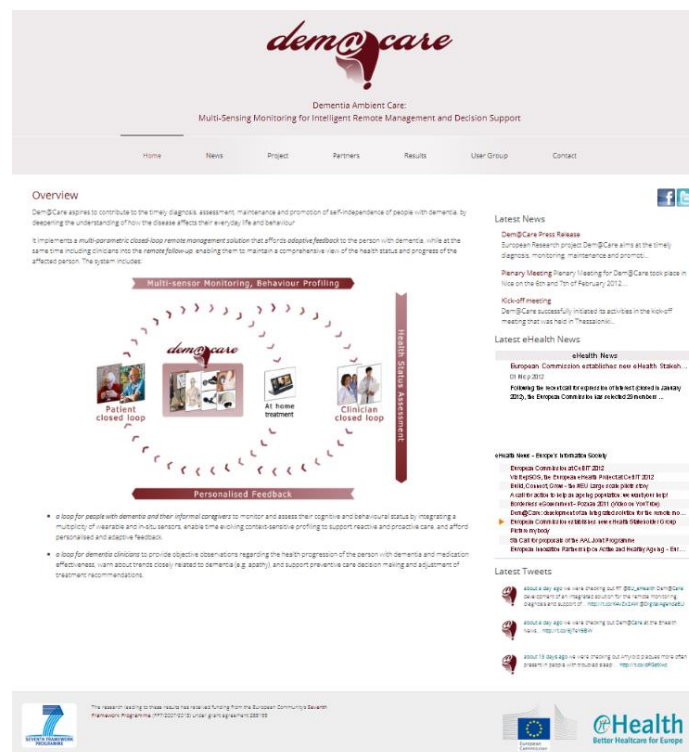


Figure 1: Dem@Care website front page.

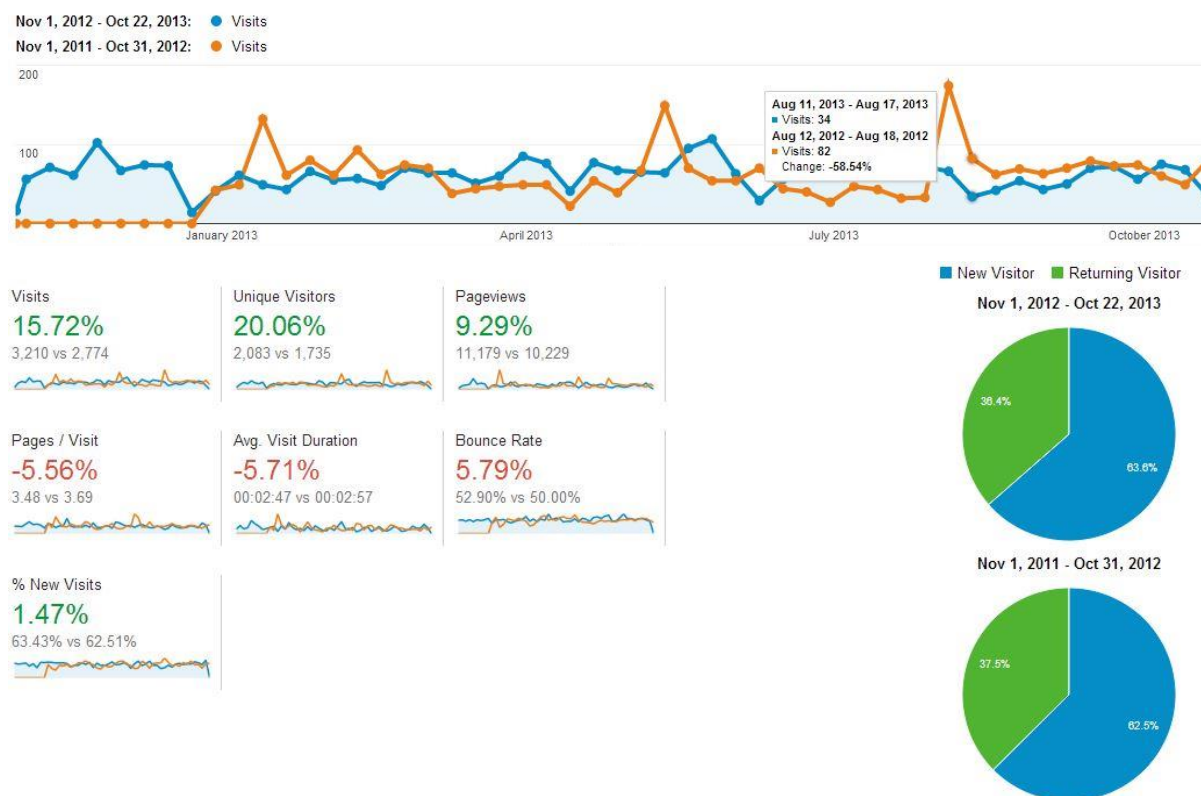


Figure 2: Project website statistics via Google Analytics

Detailed statistics about the visitors to the website are generated by the use of Google Analytics. Comparative website statistics during the 1<sup>st</sup> and 2<sup>nd</sup> years as acquired via Google Analytics can be seen in Figure 2. There is substantial increase both in the number of overall visits and unique visitors to the website, by 15% and 20% respectively, as compared to the 1<sup>st</sup> year. Since its launch, the website has attracted 3818 unique visitors and has maintained an almost 40% rate of returning visitors in both the 1<sup>st</sup> and 2<sup>nd</sup> year.

### Social Network Activities

Social networks are becoming more and more important in advertising research projects. Starting from this observation, we have built public Facebook and LinkedIn groups as well as a Twitter account. We have been synergistically using these accounts and the official project website in order to notify researchers and the general public with project-related news and information, project publications and deliverables as well as important project events, a case in point being the DemAAL summer school held in 16-20 September 2013 (see Section 2.3). Example snapshots from these social media accounts are shown in Figure 3.

In order to provide insight into the number of people reached via the Facebook page, Figure 4 displays the graph of monthly total reach to the Facebook page on a day-to-day basis for the first (blue) and second halves (red) of the 2<sup>nd</sup> project year. Periodic bimonthly jumps observed in the 1<sup>st</sup> half of the year correspond to our regular concerted efforts to advertise the project. These campaigns had been decided at the end of the 1<sup>st</sup> project year upon observing that we have not been reaching out sufficiently via Facebook. As a matter of fact, the total reach in the 2<sup>nd</sup> year has increased by 600% to 7433 from the 1<sup>st</sup> year's 1051 visitors.

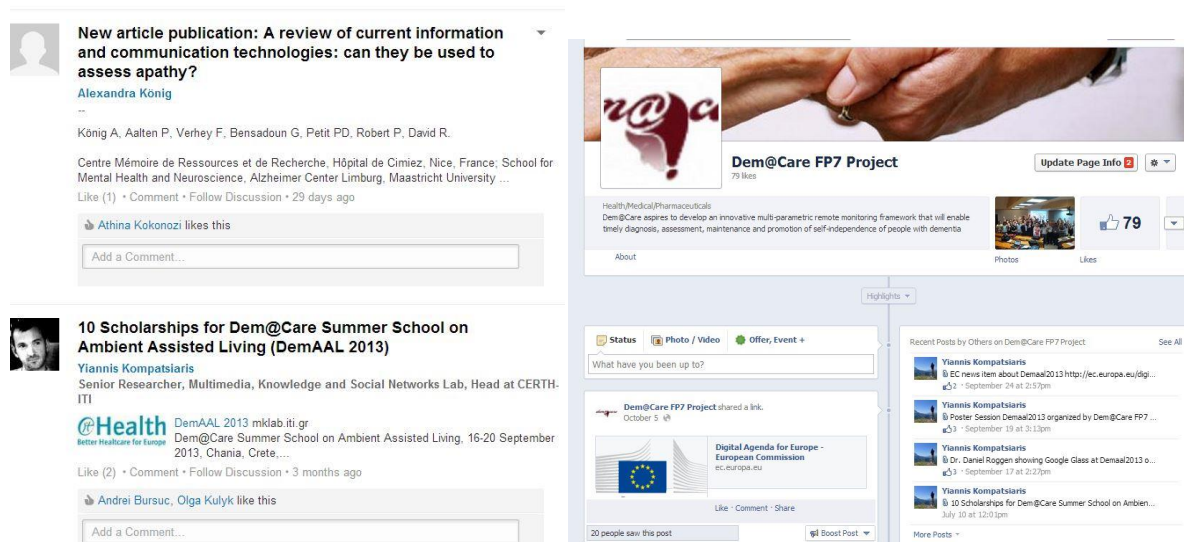


Figure 3: Snapshots from LinkedIn (left) and Facebook accounts (right)

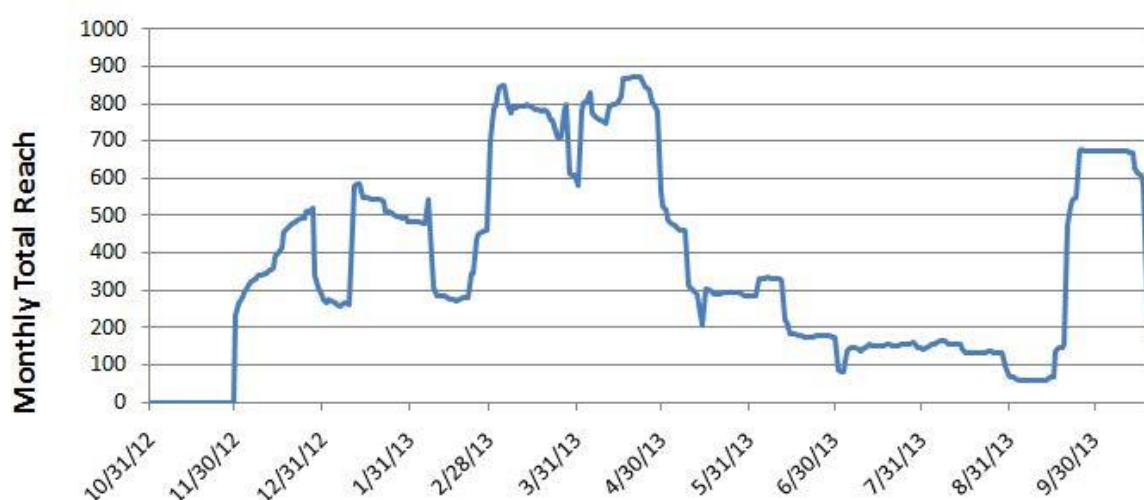


Figure 4: Monthly total reach to the Facebook page on a day-to-day basis for 2<sup>nd</sup> project year.

Concerning the demographics of the Dem@Care audience on Facebook, Figure 5 reports a balanced number of women and men who reach the page, while in terms of fans (the 79 people who “liked” the Dem@Care page) the gender distribution is rather biased towards men. In terms of age, we see that Dem@Care attracts the most interest from the 25-44 age-group.

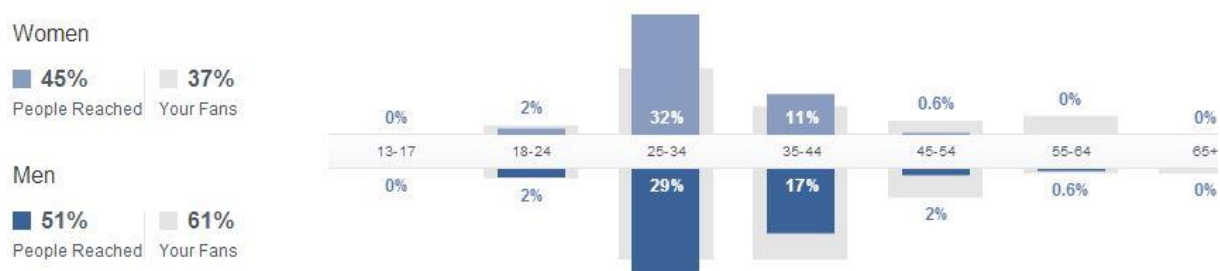


Figure 5: Gender and age statistics of the Dem@Care audience in Facebook

### Other Web Appearances and Newsletters

Newsletters constitute another web-based means for the timely communication of project progress especially for interested professional audiences. As such, Dem@Care provides input for the EU FP7 eHealth Newsletter at important project events and milestones.

The DemAAL Summer School was featured on the EC's Digital Agenda webpage: (<http://ec.europa.eu/digital-agenda/en/news/demaal-summer-school-state-art-technologies-monitor-dementia>)

## 2.2 Academic Dissemination

Dem@Care being a research project involving a significant number of academics gives strong importance to academic dissemination in terms of publications in top conferences and journals, summer school participations, special session organizations, special issue editorships and PhD dissertations.

In the second year of Dem@Care, research findings have become available and are being disseminated through the academic channels of journals, conferences and workshops. Furthermore, a summer school, workshops and conference special sessions have been organized by Dem@Care consortium, or individual partners.

28 conference papers/presentations and 8 journal article submissions have been made this year.

A complete listing of academic dissemination activities is provided in Appendix A.

## 2.3 The DemAAL Summer School

A major important activity of the period was the preparation, announcement and successful running of a summer school open to all clinical and ICT researchers, entitled Dem@Care Summer School on Ambient Assisted Living (DemAAL, <http://mklab.itl.gr/demaal2013/>). The summer school was held on 16-20 September 2013, Chania, Crete, Greece. The programme was announced on the project webpage, in several mailing lists in ICT and healthcare, on social network pages, as well as in EU eHealth in focus (Newsletter update 23/04/2013). CERTH has coordinated this task with participation by VIV, DCU and Philips.

The DemAAL summer school was primarily targeted at postgraduate (PhD or MSc) students, postdocs and researchers investigating clinical and technical aspects related to Ambient Assisted Living (AAL) technologies for remote health management, ageing well and independent living. Leading researchers from academia and industry covered theoretical and practical aspects pertinent to pervasive/ubiquitous computing technologies for Ambient Intelligence (AmI) applications, while special focus was given to the role and opportunities of

such technologies for dementia management. The rich and diverse programme of DemAAL can be seen in Figure 6. More specifically, the following topics were covered:

- Video & voice-based analytics for monitoring and assessment
- Semantic Complex Event Processing
- Wearable and pervasive computing
- Sensor networks
- Sensor correlation and fusion
- Context modelling
- Activity monitoring and recognition
- Contextual reasoning in Ambient Intelligence
- Assistive technologies for cognitive support and wellbeing

Lecture material was augmented with hands-on practical sessions. Participants were provided with electronic versions of all programme lectures and all necessary tools and environments for the hands-on sessions. In addition, participants had the opportunity to present their work and obtain feedback during a dedicated poster session intended to further facilitate interactions and the exchange of ideas. 36 participants (12 female, 24 male) from ICT and clinical backgrounds attended the summer school. The Dem@Care project granted 10 scholarships of 450 EUR each covering the full summer school registration fee including lectures, materials, accommodation, lunches and social events. Preference was given to PhD students with subjects relevant to the summer school topics and from organizations and countries where access to funds is limited.



	Monday 16/09	Tuesday 17/09	Wednesday 18/09	Thursday 19/09	Friday 20/09
8:30	Registration				
9:00		Practical Session Introduction	Francois Bremond "Video Monitoring for assessment of Alzheimer's Disease symptoms"	Claudio Bettini "Context modelling and reasoning, ontology-based context-aware activity recognition"	Mounir Mokhtari "Quality of Life of ageing people having mild dementia"
9:30	DemAAL Introduction	Alan Smeaton "Introduction and Overview of Sensing Technologies for Monitoring Human Behaviour"			
10:00	Magda Tsolaki "Alzheimer's Disease and the need of New Technologies"		Coffee Break	Coffee Break	Kåre Synnes "Social Sensing – utilizing Individual Communication Patterns for Cognitive Interventions"
10:30		Coffee Break	Jenny Benois-Pineaut "Elements of behaviour recognition with ego-centric visual sensors"	Antonis Bikakis "Rule-based Contextual Reasoning in Ambient Intelligence"	
11:00	Coffee Break	Daniel Roggen "Human activity recognition. Opportunistic, collective, crowd-sourced"			Coffee Break
11:30	Laura Klaming "(Neuro)psychology of dementia, lifestyle factors and dementia"		Ceyhun Burak Akgül "Machine Learning Models for Action Recognition"	Adrian Paschke "Semantic Complex Event Processing"	Chris Nugent "Designing and evaluating Cognitive Prosthetics for person with mild dementia"
12:00					
12:30		Lunch			
13:00	Lunch		Lunch	Lunch	Lunch
13:30					
14:00	Kate Irving "Ethnographic approaches to ambient assisted living design for people with dementia"	Cem Ersoy "Sensor Networks"	Alexander Sorin "Voice analytics for dementia symptoms assessment"	Practical Session	Panagiotis Bamidis "Cognitive and physical training games for elderly: how effective are they?"
14:30		Coffee Break			
15:00	Osman Ugur Sezerman "JADE: ICT for Independent Living of Elderly"	Practical Session	Coffee Break	Coffee Break	Practical Session
15:30	Coffee Break			Practical Session	
16:00	Student Poster Session				
16:30				Coffee Break	
17:00				Student Practical Session Presentations & Awards	
17:30					
18:00					
18:30		Guided sightseeing tour to the city of Chania		Beach excursion	
19:00					
19:30	Welcome Dinner		Cocktail party		

Figure 6: DemAAL 2013 Summer School Programme

## 2.4 Exhibition in EU ICT 2013

Dem@Care will participate in the ICT Exhibition to take place in Vilnius, Lithuania, from Nov 6 – 9, 2013. Several demos will be presented in an attractive and interactive manner in an appropriately designed booth, showcasing the project's potential for helping people live at home independently longer. We are collaborating with a professional company of graphics designers in order to design the booth at the ICT Exhibition event and appropriate banners for

our demo, to make it as attractive and easy to understand as possible. The booth chosen for the Dem@Care exhibition is in a central location, so it is expected to attract many visitors.

Our exhibit aims to show in a very realistic and interactive manner how Dem@Care multi-sensing can be incorporated in the daily life of a person with dementia, monitor their daily activities, enabling appropriate, easy to understand remote feedback and care.

A simulation of a kitchen/living area will be set up, with tables, chairs, objects of daily living, where visitors can test the system and watch explanatory demos. They will be able to play the role of a person with dementia, undertaking some of the daily activities examined in Dem@Care, recorded by ambient and wearable cameras. In one demo, the system will be run on a notebook, with RGB-D camera input and online activity recognition results, also shown on a post-processing visualization tool. In another demo, recognition from Dem@Care and benchmark static camera data of over 10 activities of daily living (ADLs) with State of the Art accuracy will be demonstrated in illustrative videos of both intermediate and final processing steps in an attractive and understandable manner. A sample living area with characteristic results from RGB-D data can be seen in Figure 7.



Figure 7: A sample living area with characteristic results from RGB-D data (to be demonstrated during ICT 2013)

Wearable video results will show they are key in characterizing daily activities in the lab or home: the egocentric point of view of a wearable camera helps recognize activities, objects used by people and the context in which activities occur. Visitors will be able to try the wearable camera and see its video streamed to a smartphone, to understand what information on ADLs can be extracted. Demos will illustrate how salient scene elements are automatically extracted to improve object recognition. Several levels of granularity are extracted for location and posture recognition of a person: room/location, 3D position/orientation of the person.

The potential of audio as a meaningful, accurate and affordable marker for early dementia detection will be presented in a video including a talk by neurologist-psychiatrist Prof. Tsolaki. Automatic speech analysis can help gauge the effectiveness of a treatment, identify warning signs, and support preventative care by allowing early intervention. Dem@Care speech analysis is expected to significantly improve vocal marker accuracy for early detection and monitoring of dementia.

All sensor demos will be accompanied by portable, easy to use, wireless interaction and feedback devices of all sizes, which visitors can test out to see how they give feedback



triggered by video-based activity detection in a synchronized manner, and show innovative life-logging photo-diaries from before and during the exhibition. Video demonstrations, presentations, and posters will be used to describe the overall context of the system and the computer vision and speech analysis algorithms employed.

## 2.5 1st ACM MM Multimedia Indexing and Information Retrieval Workshop (MIRRH)

CERTH and UB1 in collaboration with Alex Hauptman from Carnegie-Mellon University organized MIRRH, which was held in conjunction with ACM MM 2013, the top conference in Multimedia domain. The objective was to form a platform for the continued discussion of key research issues in multimedia for healthcare, remote monitoring and treatment. Both theoretical, i.e. research-oriented and practical, application-specific issues related to the extraction of lifestyle, behavior and health information from multimodal data were addressed.

Workshop papers focused on the analysis of multimodal data to obtain information pertinent to healthcare problems and also examine remote monitoring solutions. Personalization, unobtrusiveness, accuracy of analysis results, data storage, transmission, marketability and privacy concerns were among the many topics of interest. The call for papers can be seen in Figure 8.

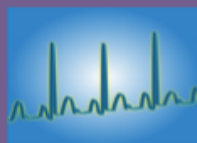
Ten papers were accepted as can be seen in [http://mklab.iti.gr/miirh/?page\\_id=205](http://mklab.iti.gr/miirh/?page_id=205) and an invited talk by expert Prof. Linda Shapiro on interdisciplinary challenges of pattern recognition in biomedical applications, was given in a well-attended event.

The impact of the workshop was significant. As a result of the success of the workshop, a new area will be open in ACM MM 2014: Multimedia and Society. J. Benois-Pineau (the UB1 co-organizer) is invited to co-chair it. This shows the very active research topic and contribution of the Dem@Care project.

There was also interest in collaboration from Prof. Ramesh Jain, University of California, Irvine on the field of multimodal data for human sensing for health applications. The procedure for sharing project's data is initiated.

## The First ACM MM workshop on multimedia information indexing and retrieval for healthcare

Oct 21-25 2013, Barcelona, Spain



### ACM MIIRH 2013

#### Workshop Organizers:

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#### Important Dates:

Submission deadline:  
April 15, 2013

Notification of  
acceptance:  
April 30, 2013

Camera ready deadline:  
1 August, 2013



Dementia Ambient Care: Multi-  
Sensing Monitoring for Intelligent  
Remote Management and  
Decision Support



**MIIRH 2013** is the first Workshop on Multimedia Information Indexing and Retrieval for Healthcare. Its topics include research-oriented, ethical, legal and practical issues for remote monitoring of lifestyle, behavior, health from multimodal data. The setup of smart homes is also of interest, as they need to ensure reliable, discreet, privacy preserving and cost-efficient measurements. Marketing of multimodal remote monitoring needs to be examined, as independent living at home, smart homes and remote care are to gain great importance. The workshop will provide a forum for researchers to share information on multimedia information retrieval and indexing with healthcare applications. MIIRH will feature an invited talk by Prof. Linda Shapiro on interdisciplinary challenges of pattern recognition in biomedical applications. Topics on multimedia in healthcare include but not limited to:

- Multimodal information retrieval and indexing for remote healthcare
- Database management for health monitoring and remote care
- Design of smart-homes focusing on remote health monitoring
- Feedback solutions for remote healthcare
- Ethical and Legal Aspects of at home multimodal health monitoring
- Marketing of multimodal monitoring for healthcare

#### Paper selection process:

Papers should follow the *ACM MM 2013 format*. Workshop participants must register for both the conference and the workshop. Each submission will be evaluated by at least three reviewers for novelty, significance, technique, experiments, presentation. Reviewers will be program committee members or researchers recommended by members. Papers with higher average scores will be accepted. At the end of the workshop, a best paper award will be offered, based on technical reviews and oral presentation. Accepted papers will be published in the proceedings of the workshop which will be made available on site and electronically.

#### Potential Program Committee:

Bibi van den Berg, Law School of Leiden U. Netherlands (NL)	Paul King, Healthwise (USA)
Alberto Del Bimbo, Center for Media Integration/Univ. of Florence (It)	Ioannis Kompatsiaris, ITI-CERTH (Gr)
François Bremond, INRIA Sophia (Fr)	Simon McCallum, Gjovik U.(Norway)
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Julie Downs, CMU (USA)	Dinh Phung, Deakin U. (Australia)
Anders Drachen, Game Analytics (Denmark)	Irina Rish, IBM (USA)
Pinar Duygulu Sahin Bilkent U. (Tr)	Christian Roux, Telecom Bretagne (Fr)
Mohamad Eid, NY University (UAE)	Abdulmoteleb El Saddik, U. Ottawa (Canada)
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Vasillia Hatzitaki, U. Aristotle (Gr)	Dewan Tanvir Ahmed, U. Ottawa (Canada)
Robert Istefanian, Kingston U. (UK)	Fernando de la Torre, CMU (USA)
Aleksandar Ivanovic, Demand Media (USA)	Jun-ichi Tsujii, U. Tokyo (Japan)
Mareile Kaufmann, Prio, (Norway)	Josef Wiemeyer, TU Darmstadt (Germany)
	Georgios Yannakakis, IT U. Copenhagen (Denmark)

Figure 8: MIIRH call for papers.

## 2.6 Other Events: Exhibitions, Talks/Lectures and Demonstrators

Dem@Care is also active in giving talks and lectures, presenting and demonstrating project prototypes and progress in professional and public healthcare ICT exhibitions as well as in sister project meetings. We consider this type of activity as one of the most important means to advertise the project among healthcare professionals as well as for a better understanding of the acceptability of Dem@Care-style remote healthcare solutions.

## 2.7 Collective Summary

A summary of Dem@Care dissemination activities to the end of its second year is provided in Table 1. We have the following remarks according this table and the underlying data:

- Excluding personal communications and ad-hoc dissemination, there have been 79 unique activities in year 2, an increase over the first year, and representing a dissemination event approximately once every 4 days throughout the year.
- As expected for the second year of the project, academic publications have increased from Year 1, reaching a figure of 66 unique dissemination activities. This is in accordance with the original dissemination plan, where an increase in journal and conference activity coincides with the technical development of the Dem@Care system.
- In Year 2, web activities have concentrated on increasing presence in a few key social media networks. Naturally, there are fewer new pages being produced, since many of the sites were necessarily introduced at the start of the project. Nevertheless, Dem@Care has maintained and developed a significant web presence.
- This year there were a number of events organized by partners to further promote the Dem@Care project in face-to-face situations. These include the DemAAL summer school, a number of workshops and symposia at various conferences, and also industry and networking events, such as the EU ICT meeting in Vilnius. Furthermore, Dem@Care partners have participated in many conferences and other venues to further promote the project.

Table 1 Dem@Care First Project Year Dissemination Activities w.r.t. Categories

Activity Category	Activity Types	Number of Year-1 Activities	Number of Year-2 Activities	Cumulative
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Web	Websites Social network groups Newsletters Referral links	17	11	28
Media	Press releases Interviews	6	2	8
Academic	Journal papers Conference/Workshop papers Conference/Workshop presentations Talk/Lectures Workshop organizations Summer school participations Demonstrations	35	66	101
Other events	Exhibitions Talk/Lectures Summer school participations Demonstrations	18	28	46
All (unique activities)		68*	80*	148
* Rows above don't add to total number of unique activities as some of them are shared amongst categories.				

### 3 Partner Activities and Updated Plans

#### 3.1 CERTH

As project co-ordinator, CERTH took a leading role in the organization of invited sessions at conferences and in the establishment of the DemAAL Summer School in Chania, Crete.

Organization tasks:

- Organization of 1st ACM MM Multimedia Indexing and Information Retrieval Workshop (MIRRH)
- Organization of Invited Session Ambient Telecare at InMed 2013
- Organization of Summer School: DemAAL 2013

Academic publications

- Georgios Meditskos, Stamatia Dasiopoulou, Vasiliki Efstathiou, Ioannis Kompatsiaris. "SP-ACT: A Hybrid Framework for Complex Activity Recognition, Combining OWL and SPARQL Rules", 10th IEEE Workshop on Context Modeling and Reasoning, March 18-22, 2013, San Diego, California, USA
- Konstantinos Avgerinakis, Alexia Briasouli, Ioannis Kompatsiaris. "Robust Monocular Recognition of Activities of Daily Living for Smart Homes", The 9th International Conference on Intelligent Environments, July 18-19 2013, Athens, Greece.
- Georgios Meditskos, Stamatia Dasiopoulou, Vasiliki Efstathiou, Ioannis Kompatsiaris: "Ontology Patterns for Complex Activity Modelling". RuleML 2013: 144-157. 7th International Web Rule Symposium.

Submitted for publication:

- Konstantinos Avgerinakis, Alexia Briasouli, Ioannis Kompatsiaris. "Optimal trajectories and Motion Boundary Activity Areas for Activities of Daily Living (ADL) recognition" – International Journal of Pattern Recognition

#### 3.2 UB1

UB1 participated in several events in partnership with local clinical partners and associations to raise awareness and inform the general, scientific and medical communities, about the objectives and planning of the Dem@Care project. These awareness-raising and informing activities are:

- VASC Seminar at CMU: "Fusion of multiple cues in recognition of activities in wearable video for Dementia Studies", Jenny Benois-Pineau
- Organisation of First ACM MM Workshop on Multimedia Information Indexing and Retrieval for Healthcare (MIIRH)
- Interview of Prof. Benois-Pineau in high-circulation Scientific Newsletter "Actualités: Une caméra embarquée diagnostiquera Alzheimer".
- Organisation of Ambient Telecare invited session at InMed 2013

- Presentation of wearable video technologies in the project at a Workshop “E-senior “ organized by the association e-senior, October 17, City hall Paris 11, France

UB1 also targeted the scientific community in signal and image processing and computer vision with the following publications:

Journal paper:

- Vladislavs Dovgalecs, Rémi Mégret, and Yannick Berthoumieu, “Multiple Feature Fusion Based on Co-Training Approach and Time Regularization for Place Classification in Wearable Video”, *Advances in Multimedia*, 2013

Conference papers:

- Hugo Boujut, Vincent Buso, Guillaume Bourmaud, Jenny Benois-Pineau, Rémi Mégret, Jean-Philippe-Domenger, Yann Gaestel, Jean-François Dartigues, “Egocentric vision IT technologies for Alzheimer disease assessment and studies”, *RITS 2013*, 8-11 April 2013, Bordeaux, France.
- G. Bourmaud, R. Mégret, A. Giremus, Y. Berthoumieu, “Discrete Extended Kalman Filter on Lie Groups”, *21st European Signal Processing Conference EUSIPCO 2013*, September 2013.
- G. Bourmaud, R. Mégret, A. Giremus, Y. Berthoumieu, “Filtre de Kalman Etendu Discret sur Groupe de Lie”, *GRETSI 2013*, Brest, France, September 2013.
- Iván González Díaz, Vincent Buso, Jenny Benois-Pineau, Guillaume Bourmaud and Rémi Megret. “Modeling Instrumental Activities of Daily Living in egocentric vision as sequences of active objects and context for Alzheimer disease Research”, *ACM MM MIIRH 2013*, Barcelona, Spain, October 2013.
- H. Boujut, V. Buso, J. Benois-Pineau, Y. Gaestel, J.-F. Dartigues. “Visual Saliency Maps for Studies of Behavior of Patients with Neurodegenerative Diseases: Observers' versus Actors' Points of View”, *InMed 2013*, Piraeus, Greece, July 17-19, 2013

### 3.3 Cassidian

During the second project year, Cassidian (CS) activities have been based on personal communications and ad-hoc dissemination at relevant corporate meetings, business events and gatherings. Cassidian has presented Dem@Care in two internal science and innovation exhibitions organized for their customers. The project attracted a lot of attention from the French national government. In particular, Cassidian has made two presentations of the Dem@Care project for the French Ministry of Defence.

### 3.4 INRIA

INRIA presented the project at the Second Spring Short School on Surveillance, which was held in May 2013 in Modena, Italy, where François Bremond was invited to attend as a speaker. In addition, INRIA held a number of demonstration sessions for visitors to their campus.

The INRIA team has presented their work in a number of academic channels this year:



- 10th IEEE International Conference on Advanced Video and Signal-Based Surveillance 2013
- 1st ACM MM Workshop on Multimedia Indexing and information Retrieval for Healthcare: held in conjunction with ACM MM 2013
- 10th IEEE International Conference on Automatic Face and Gesture Recognition (FG 2013)
- 10th IASTED International Conference on Signal Processing, Pattern Recognition and Applications (SPPRA 2013)

Furthermore, the INRIA team has demonstrated the project to a wide range of industry and academic visitors including Toyota, the French Computer Science Research Community, and other EU projects.

### 3.5 LTU

LTU continues to actively promote Dem@Care towards regional, national and European stakeholders. Key dissemination activities in prospect are listed below:

- Innovation & Ehealth workshop in Kemi 1-2<sup>nd</sup> November 2012 – Dem@Care was included in a keynote about the commercial aspects of using ICT to support persons with dementia, reaching about 60 SMEs and scientists.  
[www.amiando.com/KITENPI.html?page=832359](http://www.amiando.com/KITENPI.html?page=832359)
- Participation in the Telematika conference held in St. Petersburg, Russia to an audience of scientists and SMEs.
- Participation at ICOST 2013 in Singapore June 2013
- Participation at EMBC 2013 in Osaka July 2013
- Participation at Future Internet Assembly in Dublin, May 2013.

LTU also published a number of papers in the last year. These include:

- Basel Kikfia and Eva Karlsson, "Integrated Sensor-based Monitoring for People with Dementia in a Nursing Home to Promote a Person-centered Care" at Alzheimer Europe Conference, Malta, October 2013
- Eva Karlsson, Karin Axelsson, Karin Zingmark, Kjell Fahlander, Stefan Sävenstedt, "Carpe diem - Supporting conversations between people with dementia and their family members" in Journal of Gerontological Nursing
- Eva Karlsson and Stefan Sävenstedt, "Lifelogging to support daily life among people with Alzheimer's disease", ACENDIO nursing conference, e-Health and nursing: Innovations for the future, Dublin, March 2013.

### 3.6 DCU

In the last year, DCU published a number of academic articles based on research carried out in Dem@Care.

DCU participated in an exhibition in the Science Gallery, Dublin, entitled "GAME". The exhibit was entitled "MyLife Walkthrough", which aims to employ video game media to deliver life review therapy to gallery visitors. Ultimately this game will be delivered to a dementia population, with the aim of improving autobiographical memory by increasing the

amount of encoding and interaction needed to play the game, as compared with a typical life review scrapbook.

DCU presented “Ethics of Ambient Intelligence for People with Dementia – The value of the goals of AmI for PwD” at the European Society for Philosophy of Medicine and Healthcare conference, 15<sup>th</sup> August 2013, Basel, Switzerland.

DCU presented the "toolbox" approach to deploying the Dem@Care system in the homes of people with dementia at the Workshop on Design for Vulnerable Populations, which was held as part of the ACM SIGCHI Conference on Human Factors in Computing Systems in April 2013.

A study on sensor visibility was conducted. The study investigated how conspicuous sensors are in a daily activity such as conversation. The results of this study will be presented at a workshop in the WishWell 2013 conference to be held in Dublin in December 2013. This conference will help to publicise the project with the healthcare technology community.

DCU currently has three papers submitted for review for journal publication:

- Joanna McHugh, Eamonn Newman, Lee Tobin, Alan Smeaton, Kate Irving, "MyLife Walkthrough: Gamification of the Life Story Review in Reminiscence Therapy for older adults with dementia", *Journal of Entertainment Computing* (submitted August 2013)
- Joanna McHugh, Alan Smeaton, Kate Irving, Eamonn Newman, Emma Murphy, "Designing for and with individuals with dementia: The Dem@Care 'Toolbox' approach" - *Int J Human Computer Systems* (submitted September 2013)
- Peter Novitzky, Alan F. Smeaton, Cynthia Chen, Kate Irving, Tim Jacquemard, Fiachra O’Brolcháin, Dónal O’Mathúna, Bert Gordijn, "A Review Of Contemporary Work On The Ethics Of Ambient Assisted Living Technologies For People With Dementia" to the *Journal of Science and Engineering Ethics* (submitted October 2013)

### 3.7 IBM

IBM presented a paper entitled “Voice-Based Sadness and Anger Recognition with Cross-Corpora Evaluation” at the 2013 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) held in Vancouver, BC, Canada in May. The paper was written by Orith Toledo-Ronen and Alexander Sorin.

IBM co-authored a paper with CERTH and the Greek Alzheimers Association which was presented as a poster at INTERSPEECH 2013. The paper was titled "Evaluation of Speech-Based Protocol for Detection of Early-Stage Dementia" and the authors were Aharon Satt, Alexander Sorin, Orith Toledo-Ronen, Ioannis Kompatsiaris, Athina Kokonozi, Magda Tsolaki, Oren Barkan.

### 3.8 PENB

Philips dissemination activities mainly include communications and presentations at internal meetings as well as to local stakeholders such as hospitals and care facilities. In addition, the Philips internal special interest group entitled “Healthy ageing” has been maintained in Year 2 and has seen an increase in interest.



### 3.9 CHUN

CHUN made a presentation at the INRIA Workshop PAL 2012 (Personally Assisted Living) in November, 2012 in Nancy, France with the title "Validation of ICT tools for the assessment of behavior in Alzheimer's Disease and related disorders using technological biomarkers".

CHUN made a presentation to the European Congress of Psychiatry (EPA) in April 2013 on the topic of "Assessment of behavioral symptoms in dementia patients with the help of ICT".

In June 2013, CHUN organized in collaboration with INRIA a symposium at the IAGG 2013 World Congress of Gerontology and Geriatrics held in South Korea. The theme of the symposium was "ICT in Dementia: from assessment to stimulation".

Another presentation was held at the Annual Reunion of South French Memory Clinics (IX Journée de la fédération des CMRR du sud de la France) 29th March 2013 in Nice, France entitled "Assessment of behaviour and Activities of daily living by the help of ICT".

CHUN published the following articles:

- König, A, Aalten, P, Verhey, F, Bensadoun, G, Petit, PD, Robert, P, and David, R, "A review of current information and communication technologies: can they be used to assess apathy?" *Int J Geriatr Psychiatry*, 2013.
- Robert, PH, König, A, Andrieu, S, Bremond, F, Chemin, I, Chung, PC, Dartigues, JF, Dubois, B, Feutren, G, Guillemaud, R, Kenisberg, PA, Nave, S, Vellas, B, Verhey, F, Yesavage, J, and Mallea, P, "Recommendations for ICT Use in Alzheimer's Disease Assessment: Monaco CTAD Expert Meeting." *J Nutr Health Aging*, 2013. **17**(8): p. 653-60.
- Sacco, G, Joumier, V, Darmon, N, Dechamps, A, Derreumaux, A, Lee, JH, Piano, J, Bordone, N, König, A, Teboul, B, David, R, Guerin, O, Bremond, F, and Robert, P, "Detection of activities of daily living impairment in Alzheimer's disease and mild cognitive impairment using information and communication technology." *Clin Interv Aging*, 2012. **7**: p. 539-49.

This paper is currently under review:

- Yakhia, M, König, A, van der Flier, WM, Robert, PH and David, R, "Actigraphic motor activity in MCI patients carrying out short functional activity tasks: Comparison between MCI with and without depressive symptoms." *Journal of Alzheimer's Disease*. (Submitted September 2013).

### 3.10 VIV

As the leader of WP9, VIV has coordinated project-wide dissemination activities by maintaining the dissemination planning tables, monitoring and updating the status of declared activities, adding novel activities based on partner inputs, and internal reporting of the dissemination plans.

In addition to these organizational activities, VIV has also actively participated in several events that added to the visibility of the Dem@Care project among ICT and healthcare researchers and professionals. In particular, Professor Erçil delivered a keynote speech at the Second Healthcare ICT summit held in March 2013 in Istanbul, Turkey. Prof. Erçil also

presented Dem@Care during the Horizon 2020 Information Days held in Teknokent, Istanbul Technical University in October 2013.

VIV also maintains a dedicated Dem@Care page within the company website both in Turkish and French.

## 4 Concluding Remarks

In this report, we presented the second dissemination report of Dem@Care covering the activities during the November 2012 -- October 2013 period. Dem@Care partners have been quite active in terms of dissemination, accomplishing 79 unique activities over the year. This is an increase over the first year and can be attributed to the growing maturity of the project, especially in the area of system development where experimental results are now becoming available for academic publication in journal and conference venues.

In the initial plan, we emphasized the importance of web presence not only with an official website but also with regularly updated social network accounts as well as appearances in newsletters. Our first year witnessed the establishment of an important web presence for Dem@Care, and we have continued to maintain and grow this presence throughout the second year of the project. The project website and the social media accounts are updated on a weekly basis at least, and sometimes more frequently as results or events warrant.

## A Appendices

### A.1. Dem@Care Web Presence

Partner	(Short) Link	Description	Year
CERTH	<a href="http://www.demcare.eu/">http://www.demcare.eu/</a>	Official project website	2011-2013
CERTH	<a href="http://goo.gl/bYNJw">http://goo.gl/bYNJw</a>	EU eHealth newsletter	2012
CERTH	<a href="http://goo.gl/EXpEc">http://goo.gl/EXpEc</a>	Facebook group	2011-2013
CERTH	<a href="http://goo.gl/dus2Y">http://goo.gl/dus2Y</a>	Twitter account	2011-2013
CERTH	<a href="http://goo.gl/t2oQG">http://goo.gl/t2oQG</a>	Webpage at ITI-Main website	2011-2013
CERTH	<a href="http://goo.gl/EbwBE">http://goo.gl/EbwBE</a>	LinkedIn group	2012-2013
CERTH	<a href="http://goo.gl/CrEXo">http://goo.gl/CrEXo</a>	Webpage at ITI-Multimedia group website	2011-2013
LTU	<a href="http://goo.gl/qDmTS">http://goo.gl/qDmTS</a>	Swedish webpage	2011-2013
DCU	n/a	Clarity newsletter	2012
DCU	<a href="http://goo.gl/F5FXo">http://goo.gl/F5FXo</a>	Link to project website	2012
DCU	<a href="http://goo.gl/HTlk9">http://goo.gl/HTlk9</a>	News article	2012
IBM	<a href="http://goo.gl/zs0L2">http://goo.gl/zs0L2</a>	Post in IBM Research news	2012
PENB	n/a	Global Philips Research Newsletter	2012
CHUN	<a href="http://goo.gl/Sr1Wv">http://goo.gl/Sr1Wv</a>	Cobtek team presentation, link to project website	2012
CHUN	<a href="http://goo.gl/tq6Fd">http://goo.gl/tq6Fd</a>	EU eHealth newsletter: IA Workshop 2012	2012
VIV	<a href="http://goo.gl/s3cT8">http://goo.gl/s3cT8</a>	Company webpage	2011-2013
LCS	<a href="http://goo.gl/wGEK0">http://goo.gl/wGEK0</a>	Company webpage	2011-2013
CERTH	<a href="http://goo.gl/4dBzRo">http://goo.gl/4dBzRo</a>	DemAAL summer school webpage	2013
CERTH	<a href="http://goo.gl/gfumX5">http://goo.gl/gfumX5</a>	DemAAL announcement on the EC's Digital Agenda webpage	2013

## A.2. Dem@Care Media Appearances

Partner	Link	Description
CERTH	<a href="http://goo.gl/HFlar">http://goo.gl/HFlar</a>	Dem@Care press release in Kathimerini
CERTH	<a href="http://goo.gl/RGrvS">http://goo.gl/RGrvS</a>	Dem@Care press release in Agelioforos
UB1	n/a	Radio interview at Radio Campus Bordeaux, France
INRIA	<a href="http://goo.gl/g9yOd">http://goo.gl/g9yOd</a>	Le Figaro article
DCU	<a href="http://goo.gl/BwX6w">http://goo.gl/BwX6w</a>	Kate Irving interviewed by Today with Pat Kenny, RTE Radio 1
CHUN	<a href="http://goo.gl/rF0hw">http://goo.gl/rF0hw</a>	Interview with Dr. Philippe Robert

### A.3. Dem@Care Academic Dissemination

#### Academic Dissemination – Year 1

Partner	Activity Type	(Short) Link	Description
CERTH	Summer school	<a href="http://goo.gl/Ds2Gz">http://goo.gl/Ds2Gz</a>	INRIA Visual Recognition and Machine Learning (CVML ) 2012: July 9-13, Grenoble, France.
CERTH	Conference/ICT healthcare	<a href="http://www.aalforum.eu/">http://www.aalforum.eu/</a>	Ambient Assisted Living (AAL) Forum 2012: Sept 24-27, Eindhoven, Netherlands.
CERTH	Conference	<a href="http://www.icip2012.com/">http://www.icip2012.com/</a>	IEEE International Conference on Image Processing (ICIP) 2012: Sept 30-Oct 3, Orlando, Florida, USA
CERTH	Conference	<a href="http://goo.gl/ZGwI5">http://goo.gl/ZGwI5</a>	IEEE International Symposium on Monitoring & Surveillance Research (ISMSR) Workshop – ICTAI 2012 (accepted): Nov. 7-9, Athens, Greece.
CERTH	Conference/ICT healthcare	<a href="http://goo.gl/9nhZW">http://goo.gl/9nhZW</a>	Symposium of World Congress of Gerontology and Geriatrics (IAGG) 2013, 23-27 June, Coex, Seoul, Korea.
UB1	Workshop organization	<a href="http://goo.gl/SDpQd">http://goo.gl/SDpQd</a>	Workshop on “Information Fusion in Computer Vision for Concept Recognition” (IFCVCR 2012) at ECCV 2012) on 13/10/2012 in Firenze, Italy
UB1	Conference	<a href="http://goo.gl/SDpQd">http://goo.gl/SDpQd</a>	Presentation of a paper “Fusion of Multiple Visual Cues for Visual Saliency Extraction from Wearable Camera Settings with Strong Motion” at IFCVCR workshop, ECCV 2012.
UB1	Summer school	<a href="http://goo.gl/OUIzq">http://goo.gl/OUIzq</a>	Participation to the Human Activity and Vision Summer School 2012 (HAVSS) organized by INRIA in Nice, France, on 1-5/10/2012, with the presentation of a poster on “Wearable camera monitoring for IADL analysis: location estimation in an indoor environment”
UB1	Journal paper	n/a	Submission to IEEE Journal of Selected Topics in Signal Processing on “Extended Kalman Filter on Lie Groups”
INRIA	Demonstration	n/a	Demo at Colloque National: Maladie d'Alzheimer et les Nouvelles Tehnologies: Enjeux Ethiques et questions de société
INRIA	Demonstration	n/a	Demo at Press release: Maladie d'Alzheimer, les Nouvelles Tehnologies et les robots d'assistance
INRIA	Summer school	<a href="http://goo.gl/Ds2Gz">http://goo.gl/Ds2Gz</a>	INRIA Visual Recognition and Machine Learning (CVML ) 2012: July 9-13, Grenoble, France.
INRIA	Workshop/ICT healthcare	<a href="http://goo.gl/Hvnqp">http://goo.gl/Hvnqp</a>	GERONTOLOGICAL workshop organized by UNIVERSITAS TARUMANAGARA
INRIA	Workshop	<a href="http://goo.gl/hYlbr">http://goo.gl/hYlbr</a>	3rd Int. Workshop on Human Behavior Understanding (HBU'2012) to be held in conjunction with IROS'2012

INRIA	Workshop/ICT healthcare	<a href="http://www.fabs2012.com/">http://www.fabs2012.com/</a>	French American Biotech Symposium
INRIA	Workshop/ICT healthcare	n/a	2ème Workshop sur Nouvelles Technologies et Santé organisé par Innovation Alzheimer
INRIA	Workshop/ICT healthcare	<a href="http://pal.inria.fr/">http://pal.inria.fr/</a>	PAL Workshop Assisting Living
INRIA	Conference/ICT healthcare	<a href="http://goo.gl/L5SdL">http://goo.gl/L5SdL</a>	ISG*ISARC 2012 conference in Eindhoven – Netherlands
INRIA	Conference	<a href="http://goo.gl/64THQ">http://goo.gl/64THQ</a>	Second International Conference on Ambient Computing, Applications, Services and Technologies (AMBIENT 2012) Barcelona – Spain, “ Multi Sensor Approach for Activity Recognition in Older Patients”
INRIA	Talk/Lecture	<a href="http://goo.gl/64THQ">http://goo.gl/64THQ</a>	Second International Conference on Ambient Computing, Applications, Services and Technologies (AMBIENT 2012) Barcelona – Spain
LTU	Conference/ICT healthcare	<a href="http://goo.gl/A53d2">http://goo.gl/A53d2</a>	ICOST 2012
LTU	Conference/ICT healthcare	<a href="http://www.nll.se/alec">http://www.nll.se/alec</a>	ALEC 2012
LTU	Conference/ICT healthcare	<a href="http://goo.gl/A1Mpu">http://goo.gl/A1Mpu</a>	Swedish Medical Technology Conference
DCU	Conference/ICT healthcare	<a href="http://goo.gl/LN2EV">http://goo.gl/LN2EV</a>	Poster presentation at Irish Gerontological Society Annual Meeting
DCU	Conference/ICT healthcare	<a href="http://goo.gl/7pEjz">http://goo.gl/7pEjz</a>	Poster Interdem Meeting Oct 2012
IBM	Conference	<a href="http://interspeech2012.org/">http://interspeech2012.org/</a>	Paper O. Toledo-Ronen, H. Aronowitz “Confidence for Speaker Diarization using PCA Spectral Ratio” has been published in Interspeech Proc. 2012
CHUN	Conference/ICT healthcare	<a href="http://www.alztoulouse2012.com/">http://www.alztoulouse2012.com/</a>	Oral presentation at ALZtoulouse 2012, 11th Réunion Francophone sur la maladie d’Alzheimer et les syndromes apparentés
CHUN	Conference/ICT healthcare	<a href="http://goo.gl/L5SdL">http://goo.gl/L5SdL</a>	Oral presentation at ISG*ISARC
CHUN	Talk/Lecture	<a href="http://goo.gl/Pn8nk">http://goo.gl/Pn8nk</a>	State of the art lecture at European Psychiatric Association Congress
CHUN	Talk/Lecture	n/a	Lecture at “Semaine du Cerveau”
CHUN	Conference/ICT healthcare	<a href="http://goo.gl/vz8NV">http://goo.gl/vz8NV</a>	Poster presentation 6th International Conference on Bioinformatics and Biomedical Engineering (ICBBE). mai 2012. Shanghai (China)
CHUN	Conference/ICT healthcare	<a href="http://goo.gl/z8rFl">http://goo.gl/z8rFl</a>	Oral presentation at 12th International Stockholm/Springfield Symposium on Advances in Alzheimer Therapy
CHUN	Conference/ICT healthcare	n/a	Oral presentation at Congrès salon HIT (Health information technologies)
CHUN	Journal paper	n/a	Article submitted August 2012 to Dove Press Journal Clinical Interventions in Aging, Publication 27. September 2012 “Detection of activities of daily living impairment in Alzheimer’s disease and mild cognitive impairment using information and communication technology”
CHUN	Workshop organization	<a href="http://goo.gl/tq6Fd">http://goo.gl/tq6Fd</a>	IA (Innovation Alzheimer) Workshop 2012: Intersection between ICT& Health – defining guidelines

## Academic Dissemination – Year 2

CERTH	Conference	March 18, 2013	Georgios Meditskos, Stamatia Dasiopoulou, Vasiliki Efstathiou, Ioannis Kompatsiaris. SP-ACT: A Hybrid Framework for Complex Activity Recognition, Combining OWL and SPARQL Rules. 10th IEEE Workshop on Context Modeling and Reasoning, March 18-22, 2013, San Diego, California, USA
CERTH	Conference	April 28, 2013	Greek multidisciplinary Conf. for Alzheimer's Disease and Related Disorders with International participation, 28th of February 2013, Thessaloniki, Greece
CERTH	Conference	July 11, 2013	Georgios Meditskos, Stamatia Dasiopoulou, Vasiliki Efstathiou, Ioannis Kompatsiaris: Ontology Patterns for Complex Activity Modelling. RuleML 2013: 144-157.
CERTH	Workshop organization	July 17, 2013	Organization of Invited Session Ambient Telecare at InMed 2013
CERTH	Conference	July 18, 2013	Konstantinos Avgerinakis, Alexia Briasouli, Ioannis Kompatsiaris. Robust Monocular Recognition of Activities of Daily Living for Smart Homes. The 9th International Conference on Intelligent Environments, July 18-19 2013, Athens, Greece.
CERTH	Summer school organization	September 16, 2013	DemAAL 2013, Chania, Crete, Greece.
CERTH	Workshop organization	October 21, 2013	Organization of 1st ACM MM Multimedia Indexing and Information Retrieval Workshop
CERTH	Conference/ICT Healthcare	October 2, 2013	Poster Presentation - European Health Forum at Glastein, Austria. October 2-4, 2013
CERTH	Journal paper	September 1, 2013	"Optimal trajectories and Motion Boundary Activity Areas for Activities of Daily Living (ADL) recognition" - Int J. Pattern Recognition
CHUN	Conference	April 1, 2013	Oral presentation at EPA (European Congress of Psychiatry): Assessment of behavioral symptoms in dementia patients with the help of ICTs, April 2013 Nice, France
CHUN	Conference	June 23, 2013	ICT in Dementia: from assessment to stimulation, Symposium in IAGG 2013, 23-27 June 2013 Coex, Seoul, Korea
CHUN	Conference	November 1, 2012	"Validation of ICT tools for the assessment of behavior in Alzheimer's Disease and related disorders using technological biomarkers" INRIA Workshop PAL 2012 (Personally Assisted Living) in November, 2012 in Nancy, France



CHUN	Journal paper	February 1, 2013	"Recommendations for ICT use in Alzheimer's Disease Assessment: Monaco CTAD expert meeting" - Journal of Nutrition, Health and Aging.
CHUN	Journal paper	September 1, 2013	"Review of current information and communication technologies: can they be used to assess apathy?" - Int J Geriatric Psychiatry. Sept 2013
CHUN	Journal paper	September 1, 2013	"Actigraphic motor activity in MCI patients carrying out a short functional activity task: Comparison between MCI with and without depressive symptoms" - Int J Alzheimer's Diseases.
DCU	Conference	October 9, 2012	Active and Healthy Ageing Conference, 9-10 October 2012 Tokyo, Japan
DCU	Conference	April 27, 2013	Position paper at Workshop on Design for Vulnerable Populations - ACM SIGCHI Conference on Human Factors in Computing Systems, Paris, 27th April 2013
DCU	Conference	May 1, 2013	Poster presentation at Psychology, Health & Medicine conference, Dublin, Ireland, May 1st, 2013
DCU	Journal paper	July 1, 2013	"MyLife Walkthrough: Gamification of the Life Story Review in Reminiscence Therapy for older adults with dementia", Journal of Entertainment Computing (under review)
DCU	Journal paper	August 1, 2013	"Designing for and with individuals with dementia: The Dem@Care 'Toolbox' approach" - Int J Human Computer Systems (under review)
DCU	Journal paper	October 14, 2013	"A Review Of Contemporary Work On The Ethics Of Ambient Assisted Living Technologies For People With Dementia" Journal of Science and Engineering Ethics (under review)
IBM	Conference	May 1, 2013	O. Toledo-Ronen, A. Sorin, "Voice-Based Sadness and Anger Recognition with Cross-Corpora Evaluation", ICASSP 2013, Canada, May 2013
IBM	Conference	July 1, 2013	Paper: O. Toledo-Ronen, A. Sorin, "Emotion detection for dementia patients monitoring", Afeka Speech Processing Conference, Tel Aviv, Israel, July 2013
IBM	Conference	July 1, 2013	Paper: A. Satt, A. Sorin, O. Toledo-Ronen, "Vocal Biomarkers for Dementia Patient Monitoring", Afeka Speech Processing Conference, Tel Aviv, Israel, July 2013
IBM	Talk/Lecture	May 1, 2013	Talk: O. Toledo-Ronen, "Introduction to Voice-Based Emotion Recognition", Cognitive Computing Symposium, Sagol School of Neuroscience, Tel-Aviv University, Israel, May 2013
IBM	Conference	August 1, 2013	"Evaluation of Speech-Based Protocol for Detection of Early-Stage Dementia", INTERSPEECH 2013, France, August 2013
INRIA	Conference	February 12, 2013	10th IASTED International Conference on Signal Processing, Pattern Recognition and Applications (SPPRA 2013), 12-14 February 2013 Innsbruck, Austria

INRIA	Talk/Lecture	March 29, 2013	IX Journée de la Fédération CMRR du Sud de la France, 29 march 2013 Nice, France
INRIA	Conference	April 22, 2013	10th IEEE International Conference on Automatic Face and Gesture Recognition (FG 2013), 22-26 April 2013, Shanghai, China
INRIA	Talk/Lecture	May 7, 2013	The Second Short Spring School on Surveillance (S5), 7-9 May 2013 Modena, Italy
INRIA	Conference	August 27, 2013	10th IEEE International Conference on Advanced Video and Signal-Based Surveillance 2013
INRIA	Conference	August 27, 2013	10th IEEE International Conference on Advanced Video and Signal-Based Surveillance 2013
INRIA	Conference	August 27, 2013	10th IEEE International Conference on Advanced Video and Signal-Based Surveillance 2013
INRIA	Workshop	October 21, 2013	1st ACM MM Workshop on Multimedia Indexing and information Retrieval for Healthcare: held in conjunction with ACM MM 2013
LTU	Talk/Lecture	November 1, 2012	Keynote speech at International Workshop on Innovation in eHealth and Networking in the Kolarctic Region hosted by KITENPI Project, Kemi-Tornio UAS, Finland, 1-2nd Nov 2012 Kemi-Tornio, Finland
LTU	Conference	March 22, 2013	E Karlsson, S Sävenstedt. Life logging to support daily life among people with Alzheimer's disease, ACENDIO nursing conference, e-Health and nursing: Innovations for the future. 22-23 March 2013 Dublin, Ireland
LTU	Conference/ICT Healthcare	October 11, 2013	"Integrated Sensor-based Monitoring for People with Dementia in a Nursing Home to Promote a Person-centered Care" in "Residential Care" session, Alzheimer Europe conference
LTU	Conference/ICT Healthcare	February 4, 2014	presentation at Arctic Light E-health Conference 2014
LTU	Conference	May 9, 2013	Participation in Future Internet Assembly 2013, Dublin, Ireland. May 8-10.
LTU	Journal paper	April 1, 2013	"Carpe diem - Supporting conversations between people with dementia and their next of kin", Journal of Gerontological Nursing
UB1	Journal paper	January 1, 2013	Vladislavs Dovgalecs, Rémi Mégret, and Yannick Berthoumieu. Multiple Feature Fusion Based on Co-Training Approach and Time Regularization for Place Classification in Wearable Video. Advances in Multimedia Volume 2013 (2013), Article ID 175064, accepted 5 December 2012.
UB1	Talk/Lecture	January 28, 2013	Jenny Benois-Pineau. "Fusion of multiple cues in recognition of activities in wearable video for Dementia Studies", VASC Seminar at CMU, 28/01/2013, Pittsburgh, PA, USA

UB1	Conference	April 8, 2013	Hugo Boujut, Vincent Buso, Guillaume Bourmaud, Jenny Benois-Pineau, Rémi Mégret, Jean-Philippe-Domenger, Yann Gaestel, Jean-François Dartigues, Egocentric vision IT technologies for Alzheimer disease assessment and studies, RITS 2013, 8-11 april 2013, Bordeaux, France. (national)
UB1	Workshop organization	July 17, 2013	Organization of Invited Session Ambient Telecare at InMed 2013
UB1	Workshop	July 17, 2013	H. Boujut, V. Buso, J. Benois-Pineau, Y. Gaestel, J.-F. Dartigues. “Visual Saliency Maps for Studies of Behavior of Patients with Neurodegenerative Diseases: Observers's versus Actors's Points of View”, InMed 2013, Piraeus, Greece, July 17-19, 2013
UB1	Conference	September 3, 2013	Guillaume Bourmaud, Rémi Mégret, Audrey Giremus, Yannick Berthoumieu, Filtre de Kalman Etendu Discret sur Groupe de Lie, GRETSI 2013, Brest, France.
UB1	Conference	September 9, 2013	Guillaume Bourmaud, Rémi Mégret, Audrey Giremus, Yannick Berthoumieu, Discrete Extended Kalman Filter on Lie Groups, 21th European Signal Processing Conference 2013.
UB1	Workshop organization	October 21, 2013	Organization of 1st ACM MM Multimedia Indexing and Information Retrieval Workshop
UB1	Workshop	October 21, 2013	Iván González Díaz, Vincent Buso, Jenny Benois-Pineau, Guillaume Bourmaud and Rémi Megret. “Modeling Instrumental Activities of Daily Living in egocentric vision as sequences of active objects and context for Alzheimer disease Research”, ACM MM MIIRH 2013, Barcelona, Spain, Oct 2013.
UB1	Book chapter		H. Boujut, A; Bugeau, J. Benois-Pineau. Object Recognition form wearable video: what people really see. CRC WorldPress
UB1	Conference	September 25, 2013	H. Boujut, V. Buso, J. Benois-Pineau, “Perceptual object recognition in egocentric videos”, IEEE ICIP'2013



## A.4. Dem@Care Other Events: Exhibitions, Talks/Lectures and Demonstrators

### Other Dissemination Events – Year 1

Partner	Activity Type	(Short) Link	Description
CERTH	Summer school	<a href="http://goo.gl/Ds2Gz">http://goo.gl/Ds2Gz</a>	INRIA Visual Recognition and Machine Learning (CVML ) 2012: July 9-13, Grenoble, France.
UB1	Other event	n/a	“Alzheimer : la mémoire qui fait des faux ?”, at Librairie Georges, Talence, France on 14/03/2012
UB1	Other event	n/a	Presentation during Alzheimer day (“journée Mondiale Alzheimer”), organized by Association France Alzheimer on 20/09/2012 at EHPAD, COS Villa Pia, Bordeaux, France. France Alzheimer is the main association in France for relatives and professionals specialized in Alzheimer and related diseases.
UB1	Summer school	<a href="http://goo.gl/OUIzq">http://goo.gl/OUIzq</a>	Participation to the Human Activity and Vision Summer School 2012 (HAVSS) organized by INRIA in Nice, France, on 1-5/10/2012, with the presentation of a poster on “Wearable camera monitoring for IADL analysis: location estimation in an indoor environment”
INRIA	Demonstration	n/a	Demo at Colloque National: Maladie d'Alzheimer et les Nouvelles Tehnologies: Enjeux Ethiques et questions de société
INRIA	Demonstration	n/a	Demo at Press release: Maladie d'Alzheimer, les Nouvelles Tehnologies et les robots d'assistance
INRIA	Other event	n/a	Colloquium Fondation Médéric Alzheimer EUROPEAN DEMENTIA BIOMEDICAL OUTLOOK
INRIA	Summer school	<a href="http://goo.gl/Ds2Gz">http://goo.gl/Ds2Gz</a>	INRIA Visual Recognition and Machine Learning (CVML ) 2012: July 9-13, Grenoble, France.
INRIA	Talk/Lecture	<a href="http://goo.gl/64THQ">http://goo.gl/64THQ</a>	Second International Conference on Ambient Computing, Applications, Services and Technologies (AMBIENT 2012) Barcelona – Spain
LTU	Other event	n/a	NPP RemoDem kickoff
DCU	Other event	n/a	Poster presentation at CLARITY site review
PENB	Other event	n/a	presentation of the Dem@Care project at an internal meeting
PENB	Other event	n/a	set up of a special interest group entitled “healthy ageing” for Philips Research employees interested in this topic
CHUN	Talk/Lecture	<a href="http://goo.gl/Pn8nk">http://goo.gl/Pn8nk</a>	State of the art lecture at European Psychiatric Association Congress
CHUN	Talk/Lecture	n/a	Lecture at “Semaine du Cerveau”
VIV	Other event	<a href="http://goo.gl/WJUCJ">http://goo.gl/WJUCJ</a>	Presentation at JADE Workshop
VIV	Other event	<a href="http://goo.gl/8X39c">http://goo.gl/8X39c</a>	In2Societies 2012
VIV	Other event	<a href="http://goo.gl/hDwrd">http://goo.gl/hDwrd</a>	Presentation of the Dem@Care Project at the Technology Pitching Session in AUTM Asia 2012 Commercialising Technologies to Sustain a Better World

## Other Dissemination Events – Year 2

CERTH	Other event	November 6, 2013	Proposal for networking session in EU ICT 2013
CERTH	Demonstration	November 6, 2013	Demo session in EU ICT 2013
CERTH	Other event	September 26, 2013	Presentation at REACTION clustering event. Heraklion, Crete, Greece.
CHUN	Demonstration	March 29, 2013	“Assessment of behaviour and Activities of daily living by the help of ICT”. Presentation held at the Annual Reunion of South French Memory Clinics, Nice, France.
CS	Other event	June 15, 2013	Presentation of the Dem@Care project for the French Ministry of Defense
DCU	Other event	January 1, 2013	MyLife Walkthrough - exhibition at GAME, Science Gallery, Dublin
DCU	Other event	November 1, 2012	CLARITY National Day (2 posters presented), Nov 2012, Clontarf Castle, Dublin
INRIA	Demonstration	November 6, 2012	Demo for Panorama Project partners, 06 November 2012, Sophia Antipolis, France
INRIA	Demonstration	January 22, 2013	Demo for SUPAERO day, 22 January 2013, Sophia Antipolis, France
INRIA	Demonstration	January 25, 2013	Demo for Mediterranean Students Days, 25 January 2013 Sophia Antipolis, France
INRIA	Demonstration	February 25, 2013	Demo for Visiting Teacher/Researchers of Federal University of Santa Catarina (Brazil), 25 February 2013 Sophia Antipolis, France
INRIA	Demonstration	June 4, 2013	Demonstration of our Activity Recognition system for Toyota visitor

INRIA	Demonstration	June 10, 2013	Demonstration of our Activity Recognition system for French Ambient Assisted Living and Robotics Research Community
INRIA	Demonstration	June 26, 2013	Demonstration of our Activity Recognition system for French Computer Science Research Community
INRIA	Demonstration	July 2, 2013	Demonstration of our Activity Recognition system for Centaur Project and Industrial Partners
INRIA	Demonstration	September 4, 2013	Demonstration of our Activity Recognition system for Monaco TV
INRIA	Demonstration	September 10, 2013	Demonstration of our Activity Recognition system for a COBTEK partner from Stanford University
INRIA	Interview	September 10, 2013	Interview of Francois Bremond for the french newspaper "Les Echos"
LTU	Other event	June 25, 2013	Use of ICT for Supporting People with Dementia and their Carers, Telematika 2013
LTU	Other event	September 24, 2013	participation, poster presentation in AAL Forum 2013, Norrkoping, Sweden
LTU	Other event	December 11, 2013	presentation at EIT ICT Labs - Health and Wellbeing workshop
LTU	Other event	January 19, 2014	presentation at Arctic Frontiers
UB1	Interview	June 20, 2013	Large Audience interview with Jenny Benois-Pineau in Electronic Scientific NewsLetter "Actualités Une caméra embarquée diagnostiquera Alzheimer"
VIV	Other event	March 28, 2013	Keynote speech at the 2nd Healthcare ICT Summit (by Prof. Ercil), 28-30 March 2013
VIV	Summer school organization	September 16, 2013	DemAAL
VIV	Other event	November 6, 2013	Proposal for networking session in EU ICT 2013