

*** Please accept our apologies if you receive multiple copies of this CFC ***

2nd EvAAL Competition
(Evaluating AAL Systems through Competitive Benchmarking)
<http://evaal.aaloo.org>

Track 1: Indoor Localization and Tracking for AAL
2-6 July, 2011
Madrid, ES

Track 2: Activity Recognition for AAL
9-13 July, 2011
Valencia, ES

in conjunction with the AAL Forum
(24-27 September 2012, Eindhoven, NL)

An initiative supported by the AALOA community (<http://www.aaloo.org>)
and organised by the universAAL project (<http://www.universAAL.org>)

We are pleased to announce the second EvAAL Competition. EvAAL is a newborn initiative that aims at bringing together both academic and industrial research communities to work together on challenging and open problems in Ambient Assisted Living (AAL), with the purpose of evaluating different approaches and envisioning new research opportunities. The universAAL project organises this competition because it is an opportunity to find good solutions to relevant AAL challenges. To participate in the competition is therefore also an opportunity to influence the universAAL project. This competition is the second of several planned by universAAL to find good solutions to different challenges in the AAL domain. The whole initiative is organized as an AALOA project so that the AAL community is involved from the beginning and can more easily take over the continuation of EvAAL after the universAAL project finishes.

During the competitions, we will collect large datasets that will be very useful as benchmarks to researcher communities for the simulation and test of their solutions. These will be significant benchmarks, because they will have been collected in a realistic environment (the living labs).

The competition comprises two tracks and a final workshop:

- Track 1 on Indoor Localization and Tracking for AAL, to be held on the 16-20 July, 2012 at the Smart House Living Lab of the Polytechnic University of Madrid, Spain
- Track 2 on Activity Recognition for AAL, to be held on the 9-13 July, 2012 at the CIAMI Living Lab in Valencia, Spain
- EvAAL workshop to be held in conjunction with the AAL Forum on the 24-27 September 2012, Eindhoven, NL (<http://www.aalforum.eu/>).

Track 1 – Indoor Localization and Tracking for AAL

Localization is a key component for achieving context-awareness. Recent years have witnessed an increasing trend of location-based services and applications. In most cases, however, location information is limited by the accessibility to Global Navigation Satellite Systems (GNSS), largely unavailable for indoor environments. The scope of this competition is to award the best indoor localization system from the point of view of Ambient Assisted Living (AAL) applications.

Track 2 – Activity Recognition for AAL

The automatic and unobtrusive identification of user's activities is one of the challenging goals of context-aware computing. Real-time monitoring of human activities could be a useful tool for many purposes and future applications such as lifelog, healthcare or entertainment. The scope of this competition is to award the best activity recognition system from the point of view of Ambient Assisted Living (AAL) applications.

Candidate competitors are invited to submit a paper describing their system to the appropriate track. A "competitor" can be any individual or group of individuals, from one or several organisations, working as a single team. The papers will undergo a peer review by the technical program committee members. The papers must include a description of the hardware, deployment, and algorithms and protocols used, and the description of the internal data produced and processed by the system.

Each paper must not exceed 4 pages (including tables, figures, etc.) and must be submitted by April 8th, 2012 using the instructions that will be published shortly on the EvAAL website (<http://evaal.aaloo.org>).

The evaluation criteria for the competition, restrictions on the accepted technologies, and a description of the benchmarks are detailed in the technical annexes of this call, available at <http://evaal.aaloo.org/current-competition/technical-annexes2012> (see notes below). Possible refinements of the annexes, also based on participating competitors comments, will be timely distributed to all participants.

Depending on the number of accepted papers, it may be necessary to restrict participation in the competition to the best ranked papers, due to space/logistic constraints at the Living Labs.

Competitors admitted to the competition are expected to:

1. participate to the competition in July at the living lab of the track to which they participate. The organizers will set individual appointments for each competing team in order to limit its presence at the living lab and the costs as much as possible.
2. present their work at the final EvAAL workshop that will be held in conjunction with the AAL Forum, (24-27 September 2012, Eindhoven, NL). The precise date of the workshop will be communicated as soon as possible to competitors.
3. Provide to the organizers the internal data produced by their systems during the competition and the documentation describing the deployment of their system, as requested by the organizers. These data will be published in the EvAAL website.

Competing teams failing to meet these three requirements will be excluded from the competition and from the publication of the proceedings.

The winner(s) of the competition will be announced at a special session of the AAL forum, a major event in the field of Ambient Assisted Living in Europe. The organizers intend to provide a prize for the best entries.

The organizers encourage submissions from both academia and industry (there are no restrictions to the composition of competing teams) with the aim of seeking innovative localization and activity recognition solutions for AAL applications that represent leading-edge research prototype development. Please check the EvAAL web site (<http://evaal.aaloo.org>) for more information and regular updates on progress with the competition.

Contact: info@evaal.aaloo.org

Important Dates

Paper Submission Deadline: April 8th, 2012

Acceptance Notification: May 4th, 2012

Camera Ready Deadline: June 30th, 2012

Organizing Committee:

General Chair

Dr. Stefano Chessa, (University of Pisa and ISTI-CNR, Italy)

Local Committee co-Chairs:

Dr. Juan Carlos Narajo Martinez (ITACA, Spain)

Dr. Dario Salvi (Polytecnic University of Madrid, Spain)

Publication co-Chairs:

Dr. Reiner Wichert (Fraunhofer IGD, Germany)

Dr. Stefan Knauth (Stuttgart University of Applied Sciences, Germany)

Publicity co-Chairs:

Dr. Casper Dhal Marcussen (Region Syddanmark, Denmark)

Dr. Francesco Potorti (ISTI-CNR, Italy)

Dataset Management Chair:

Dr. Juan Pablo Lazaro (TSB Soluciones Tecnologicas, Spain)

Software Tools Chair:

Dr. Dario Salvi (Polytecnic University of Madrid, Spain)

Financial Chair:

Dr. Francesco Furfari (ISTI-CNR, Italy)

Track 1 Technical Program Committee (Indoor Localization for AAL):

Chair: Dr. Paolo Barsocchi (ISTI-CNR, IT)

Members:

Prof. Adriano Moreira (University of Minho, Portugal)

Dr. Ivan Martinovic (University of Oxford, UK)

Prof. Rainer Mautz (ETH, Swiss)

Prof. Binghao Li (University of New South Wales, Australia)
Prof. Neal Patwari (University of Utah, USA)
Prof. Cesar Benavente-Peces (Polytechnic University of Madrid)
Prof. Dante I. Tapia (University of Salamanca, Spain)
Dr. Hanke Sten (AIT Austrian Institute of Technology, Austria)
Dr. Francesco Furfari (CNR-ISTI, Italy)
Prof. Stefan Knauth (Stuttgart University, Germany)
Prof. Tomás Ruiz-López (University of Granada, Spain)
Dr. Andreas Braun (Fraunhofer Institute, Germany)
Dr. Patricia Abril (Polytechnic University of Madrid)
Dr. Francesco Potorti (CNR-ISTI, Italy)
Dr. Ma Pilar Sala Soriano (Polytechnic University of Valencia, Spain)
Dr. Michele Girolami (CNR-ISTI, Italy)
Prof. Filipe Meneses (University of Minho, Portugal)
Dr. Dario Salvi (Polytechnic University of Madrid)

Track 2 Technical Program Committee (Activity Recognition for AAL):
Chair: Dr. Juan Antonio Álvarez García (Universidad de Sevilla, Spain)
Members:

Dr. Alessio Micheli, University of Pisa
Dr. Alexander Kroener, DFKI
Dr. Arantxa Rentería, TecNALIA
Prof. Cecilio Angulo, Technical University of Catalonia
Dr. Daniel Roggen, ETHZ
Prof. Diane J. Cook, Washington State University
Dr. Francesco Furfari, CNR
Dr. Francesco Potorti, CNR
Dr. Juan Antonio Alvarez, University of Sevilla (TPC Chair)
Dr. Juan Carlos Augusto, University of Ulster
Dr. Kazuya Murao, Kobe University
Dr. Mohammad-Reza (Saied) Tazari, Fraunhofer IGD
Dr. Reiner Wichert, Fraunhofer IGD
Dr. Roberta Giannantonio, Telecom Italia
Prof. Roozbeh Jafari, University of Texas at Dallas
Dr. Stefano Chessa, University of Pisa

Notes:

- (1) In order to have a smooth organization of the competition, the competitors will be requested to interface their competing artefacts with the measurement tools (that will be provided by universAAL project) that will be used in the competition. To this purpose there will be a shepherding phase in which the EvAAL organizer will help competitors to implement this integration.
- (2) The evaluation criteria for the competition, restrictions on the accepted technologies, and a description of the benchmarks are described in the technical annexes of this call (one for the localization track and one for the activity recognition track). Refinements of technical annexes based on competitors requests will be timely

distributed to all participants. The technical annexes are available in:
<http://eval.aaloa.org/current-competition/technical-annexes2012>