Call for Papers · ALPACA 2023

Important Dates & Info

The Workshop on Adaptive, Learning PervAsive Applications (ALPACA) provides a forum to foster interaction and collaboration between the research communities of adaptive, learning and pervasive computing systems, raising the awareness about related research efforts and synergies that can be exploited to advance the state of the art. ALPACA takes place in conjunction with the IEEE *International Conference on Pervasive Computing and Communications* (PerCom).

Paper submission deadline	**November 14th, 2022**
Author notification	**January 5th, 2023**
Workshop Day	**March 13th or 17th, 2023**
	(hybrid event)

List of Topics

Adaptive PerCom systems are inherently distributed and composed of possible hundreds of instances that might act autonomously. New approaches are required to achieve global goals while enabling local autonomicity. Relevant work can be found in different areas including autonomic computing, self-adaptive and self-organizing software and systems, multi-agent systems, organic computing, as well as context- and situation-aware systems. We especially welcome researchers working in those research streams. This workshop covers all topics concerning adaptive PerCom systems including:

- Fundamental science and theory of adaptive, learning PerCom systems;
- Levels and aspects of adaptive, learning PerCom systems;
- Architectures for individual and collective systems;
- Measurements, quality assurance, and evaluation in adaptive, learning PerCom systems;
- Verification & validation and testing;
- Artefacts, test beds, simulations, demonstrators of adaptive, learning PerCom systems;
- Tool support for evaluation and measurements;
- Open challenges and future research directions;
- Applications and case studies: cloud computing, cyber-physical systems, industrial internet / industry 4.0, internet of things, mobile computing, smart buildings, smart city, smart grid / energy management, smart factory, traffic management, robotics, and space applications;
- Cross-domain contributions bringing Organic/Autonomic or self-learning technology to pervasive systems.

Submission Guidelines

There are two ways to participate: i) present a talk without a respective paper published in the workshop proceedings, ii) submit a paper to be presented at the workshop and published in the workshop proceedings:

- **Full workshop paper** limited to 6 pages (double column, IEEE format, including references)
- **Short workshop paper** limited to 4 pages (double column, IEEE format, including references)
- **Talk extended abstract** limited to 2 pages (double column, IEEE format)

Contributions in the 1st and 2nd category (technical papers) must represent original and unpublished work that is not currently under review. Full papers may report on original research, lessons learned from realizing an approach, or experiences on transferring a research prototype into practice. Short papers may report on work-in-progress or present a vision or (controversial) position. Contributions in the 3rd category may present ideas in their very first stage or a (controversial) opinion. At least one author of each accepted submission is required to attend the workshop. Technical papers will be published by IEEE Computer Society Press and made available as a part of the IEEE Xplore Digital Library. Papers need to be submitted electronically via EDAS: `https://edas.info/N30133`

Organization

- **Christian Krupitzer**, University of Hohenheim, Germany
- **Gregor Schiele**, University of Duisburg-Essen, Germany
- **Sven Tomforde**, Christian-Albrechts-Universität zu Kiel, Germany