

CALL FOR PAPERS

The Second International Conference on Pervasive Computing

PERVASIVE 2004

www.pervasive2004.org

April 19-23, 2004, Linz / Vienna, Austria

A vast manifold of tiny, embedded and autonomous computing and communication systems have started to create and populate a pervasive and ubiquitous computing landscape, characterized by the autonomy of their programmed behavior, the dynamics and context-awareness of services and applications they offer, the ad-hoc interoperability of services and the different modes of user interaction upon those services. This is mostly due to technological progress like the maturing of wireless networking, exciting new information processing possibilities induced by novel microprocessor technologies, low power storage systems, smart material, and motor-, controller-, sensor- and actuator technologies. A future computing scenario is envisioned in which almost every object in our everyday environment will be equipped with embedded processors, wireless communication facilities and embedded software to perceive, perform and control a multitude of tasks and functions. Since many of these objects are already able to communicate and interact with global networks and with each other, the vision of context-aware "smart appliances" and "smart spaces" has already become a reality. Service provision is based on the ability of being aware of the presence of other objects or users, and systems can be designed in order to be sensitive, adaptive and responsive to their needs, habits and even emotions. With pervasive computing technology embodied into real world objects like furniture, clothing, crafts, rooms, etc., those artefacts also become the interface to "invisible" services and allow to mediate between the physical and digital (or virtual) world via natural interaction – away from desktop displays and keyboards. Novel interface concepts for situated interaction give rise for bringing the interaction with computers "back to the real world".

All these observations pose serious challenges to the conceptual architectures of computing, and the related engineering disciplines in computer science. PERVASIVE 2004, the Second International Conference on Pervasive Computing, provides a premier venue to bring together researchers and practitioners working in all foundational and applied research areas of pervasive and ubiquitous computing. It will include presentations, workshops, tutorials and multimedia demonstrations on subjects like:

- ❖ Pervasive and Ubiquitous Computing Architectures
- ❖ Sensors and Actuators / Computational Perception
- ❖ "Smart" Appliances / Ambient Intelligence
- ❖ New Technologies / New Materials / Small Artefacts
- ❖ Displays / Vision / Mixed Reality Systems
- ❖ Spontaneous / Wireless / Mobile Communication
- ❖ Networked Embedded Systems
- ❖ Context Awareness / Autonomous Computing
- ❖ Coordination Models and Systems
- ❖ Middleware and Software Frameworks
- ❖ Interaction Models / Interaction Design
- ❖ User Interfaces (e.g. Situative/Tangible/Attentive)
- ❖ Emerging Industrial / Business Scenarios
- ❖ Social / Privacy / Security Issues

Submissions to PERVASIVE 2004 are welcome in the following formats and categories:

Regular Papers and Tech-Notes

Regular papers should present original, highly innovative, prospective and forward-looking research in one or more of the categories given above. Just like regular papers, tech-notes should present directing research, but in very focused and compact format. Tech-notes are not understood as short papers condensed into less page space, but are intended to present pointed results at a high level of technicality. Submissions in this category will be handled electronically and must be in PDF or PostScript file format. Regular papers must not exceed 18 pages (or approx. 10000 words, including text, figures and references), tech-notes must not exceed 5 pages (or approx. 2500 words) formatted single column, single-spaced in Springer LNCS style available at <http://www.springer.de/comp/lncs/authors.html>. Accepted regular papers and tech-notes will be published in the conference proceedings. PERVASIVE 2004 will adopt a double-blind process for regular paper and tech-note review, where the identities of the authors are withheld from the reviewers and vice versa. Authors' names and their affiliations must not be revealed or mentioned anywhere in the paper or in the PDF or postscript file. Submitted papers and tech-notes must be original, unpublished work and not currently under review for any other conference or journal. Papers not following these guidelines will not be considered for the review process. To submit a paper or tech-note, please refer to the paper submission link (available from October 1st, 2003) at the conference website. Questions about the papers and tech-notes submission process should be directed to the Program Committee Chair (A. Ferscha, Univ. Linz) at progchair@pervasive2004.org.

Doctoral Colloquium

The PERVASIVE 2004 doctoral colloquium, to be held right before the main conference during April 19-20 in Linz, Austria, invites PhD students and candidates to present, discuss and defend their work-in-progress or preliminary results in an international, agile and renowned audience of junior and senior researchers and developers in the pervasive computing field. Thesis position papers (5 pages or approx. 2500 words) are solicited relating a problem statement, methodological approach, potential for innovation and expected contribution to the international pervasive computing literature. Accepted submissions will be presented during the colloquium and will be included in the PERVASIVE 2004 adjunct proceedings. The PERVASIVE 2004 Doctoral Colloquium Certificate, signed by the international colloquium committee will be handed to the successful presenters. Further information can be obtained from the conference website or the Doctoral Colloquium Chair (G. Kotsis, Univ. Linz) at doctoral@pervasive2004.org.

Videos

Submissions are invited to present novel pervasive computing systems, devices or just designs, or demonstrate innovative styles of interaction or usability of those systems – in a lively format: as a video. Video clips should be no longer than 8 minutes and be accompanied by a 4 page (or approx. 2000 words) written summary. The author(s) of a video are expected to present a brief introduction at the conference, while all full videos will be presented during the PERVASIVE 2004 Video Night – a special event at a historic place in Vienna. Video papers will be published in the PERVASIVE 2004 adjunct proceedings, all video clips will be presented in the PERVASIVE 2004 Video DVD. Further information can be obtained from the conference website or the Video Chair (H. Hörtner, Ars Electronica Center) at video@pervasive2004.org.

Tutorials and Workshops

PERVASIVE 2004 tutorials will provide the dissemination of advanced concepts, technologies and skills to the participants. Tutorial submissions should focus on seminal and pioneering topics of pervasive computing or cover an outstanding new branch of pervasive computing research. Workshop sessions will provide inspiring and influencing discussion on pervasive computing topics. Each workshop aims at the sharing and consolidation of new research ideas and fosters future co-operations. Workshop proposals may be related to any topic of pervasive computing. Further information can be obtained from the conference website, the Tutorials Chair (tutorials@pervasive2004.org) or the Workshops Chair (workshops@pervasive2004.org) respectively.

IMPORTANT DATES

	Submissions (firm!)	Notification of Acceptance	Final Version / Camera Ready
Paper & Tech-Notes	November 7, 2003	December 20, 2003	February 9, 2004
Workshop	December 1, 2003	December 8, 2003	December 15, 2003 (Workshop calls)
Video & Tutorial	January 19, 2004	February 16, 2004	March 15, 2004
Doctoral Colloquium	January 12, 2004	February 9, 2004	

PERVASIVE 2004	April 20-23, 2004	Doctoral Colloquium (in Linz)	April 19-20, 2004
Main Conference (in Vienna)	April 21-23, 2004	Pre-conference Events (in Vienna)	April 20, 2004

For updated information about PERVASIVE 2004 please visit www.pervasive2004.org or send email to info@pervasive2004.org.

(For your planning: Note that CHI2004 will be held in Vienna, Austria, April 24-29, 2004 – right after PERVASIVE 2004)



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