ACM SIGCOMM Workshop on Home Networks (HomeNets)

Call for papers

The digital home of the future is envisioned as a set of computers, consumer electronics, mobile devices and sensors that seamlessly collaborate through wired or wireless networks to share content and enrich the home user experience through advanced services. Today's reality, however, is far from that. The home networking environment is a complex mix of heterogeneous technologies, and devices, all operating independently of each other, and certainly not offering the set of services originally imagined. As the number of devices inside the home increases, and their functionality becomes more complex, we foresee complexity imposing a barrier in the adoption of technology inside homes and a lot of frustration on the part of the users that try to deal with the pain of management and debugging of home services. Existing home networks are far from fulfilling the user expectations of high Quality of Experience, advanced home services and ubiquitous access to home network resources while within or away from home.

HomeNets aims to bring together researchers and practitioners to share new ideas and experiences and to discuss the challenges and important questions posed by today's and future home networks. We solicit stimulating, original, previously unpublished ideas on completed work, position papers, and/or work-in-progress papers. We further encourage papers that propose new research directions or could generate lively debate at the workshop. While co-located with ACM Sigcomm, Homenets intends to solicit papers from the computer science, and networking community, as well as the HCI community that has also turned its attention to the technology barriers faced by users in their homes. Topics of interest include, but are not limited to:

- Monitoring, troubleshooting and Management of Home Networks
- Automatic Configuration of Home Networks (DLNA, UPnP, etc)
- Measurement studies of Home Networking usage scenarios
- Home Networking applications (Internet TV, Video Streaming, Video On Demand, Games, etc).
- Home Networking protocols and technologies (xDSL/Cable, WiFi, Bluetooth, 3/4G, femto cells, power lines, satellite, sensor networks)
- Smart technologies for home utilities (e.g., smart grid).
- Green Home Networking
- Content distribution in Home Networks
- Home Network storage architectures
- Incorporation of mobile devices to Home Networks
- Cloud-aware Home Networking
- Extended Home Networks through Remote Access and Control
- Robustness of Home Network Devices including Virtualization
- Home Networks and neighborhood/community networks.
- Home Automation with sensor technologies
- Network-aware visualization tools and interfaces for Home Networks
- Security and privacy in Home Networks
- Human Computer Interfaces for Home Systems
- User studies on main technology problems faced by home users today

Important Dates:

Paper submission: Friday, March 26, 2010 [23:59 PST]

Acceptance notification: Friday, April 23, 2010

Camera-ready: Friday, May 21, 2010

Submission Instructions:

Submissions must be no greater than 6 pages in length and must be a pdf file. Reviews will be single-blind: authors name and affiliation should be included in the submission. Submissions must follow the formatting guidelines at http://www.sigcomm.org/sigcomm2008/. Authors of accepted papers are expected to present their papers at the workshop. Submissions must be original work not under review at any other workshop, conference, or journal.

Submission website: http://homenets10.intel-ftr.net/

Workshop Organizers & Co-chairs:

Christos Gkantsidis (Microsoft Research, Cambridge)

Konstantina Papagiannaki (Intel Labs Pittsburgh)

Theodoros Salonidis (Technicolor)

Program Committee:

Suman Banerjee	University of Wisconsin
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