Call for Papers: ACM Workshop on Medical Communication Systems (MedCOMM)
In conjunction with ACM SIGCOMM
Helsinki, Finland, August 13, 2012
Abstracts due March 16, 2012

http://conferences.sigcomm.org/sigcomm/2012/medcomm.php

ACM MedCOMM invites papers that stimulate research in communications or computer networks with application to medical device communication systems. Key properties include safety, effectiveness, reliability, and security.

There is an increasing trend toward the convergence of wireless communication, Internet connectivity, and medicine. Devices with advanced computer communication range from body-worn health monitors to implantable medical devices to remote robotic medical devices in the battlefield. A growing list of such devices includes artificial vision, brain-computer interfaces for prosthetics, cardiac monitors, defibrillators, digital mammography, glucose monitors, infusion pumps, insulin pumps, neurostimulators, pacemakers, radiological electronic picture archiving and communication systems, and smart stents. All these systems depend on the safe, effective, reliable, and secure communication and computer networking. Advanced research on medical communication systems will help innovators of next-generation medical technologies that aim to improve public health in the digital age.

TOPICS

We solicit submissions on topics including, but not limited to, the following:

* Safe and effective network architectures and protocols for highly interoperable wireless medical devices
* Applications of cognitive radio to maximize spectrum utilization and spectrum sharing on unlicensed bands
* Data integrity and reliability issues in allocated or unlicensed spectrum
* Mobile phones as medical sensor gateways
* Ultra-low power communications
* Development of open medical communication systems
* Communications and computer networks designed for validation, formal verification, or hazard analysis
* Usability issues, security/privacy issues, regulatory/policy issues
* Industrial experiences, provider experiences, regulator experiences

SUBMISSION INSTRUCTIONS

Papers should fall into one of the following categories: position paper or early-stage systems/ measurement paper. MedCOMM does not seek papers of already sufficient maturity for full-length conference papers. Rather, the workshop seeks innovative papers that discuss early-stage research or consider unconventional ideas for medical communication systems. The program

committee will favor papers that are likely to generate healthy debate at the workshop. We recognize that early-stage papers will not necessarily have completed all experiments, simulation, or analysis. However, papers must have credible motivation and reasonable evidence of feasibility with clearly stated evaluation criteria.

Papers may not exceed 6 pages (including references) and must be in PDF format. Text must be in two-column, 10pt format. Reviews will be single-blind: please include author names and affiliation in the submission. Submissions must be original work not under review at any other workshop, conference, or journal. Papers not adhering to the guidelines will be rejected without review.

Authors of accepted papers are expected to present their papers at the workshop; at least one author must register to join the interactive workshop. A link to the paper submission site will be posted shortly. Information about student stipends will appear in late Spring.

IMPORTANT DATES

Abstract registration: March 16, 2012
Submissions due: March 23, 2012
Notification of acceptance: May 1, 2012
Workshop date: August 13, 2012

Please email the workshop chair with any questions you may have at:
medcomm12-chair@cs.umass.edu

ORGANIZATION

Workshop Chair

Kevin Fu (University of Massachusetts Amherst)

Program Committee

Srdjan Capkun, ETH Zürich
Nicolas Christin, Carnegie Mellon University
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