

# 4th Workshop on All Things Cellular: Operations, Applications and Challenges (formerly CellNet)

<http://conferences.sigcomm.org/sigcomm/2014/allthingscellular.php>

**co-located with ACM SIGCOMM 2014**

<http://conferences.sigcomm.org/sigcomm/2014/>

August 22, 2014, Chicago, USA

## IMPORTANT DATES

*Paper Registration:* March 21, 2014 (DEADLINE EXTENDED)

*Paper Submission:* March 28, 2014 (DEADLINE EXTENDED)

*Author Notification:* May 9, 2014

*Camera Ready:* May 30, 2014

*Workshop date:* Aug 22, 2014

## SCOPE

We are living in an increasingly connected mobile world, where smartphones and tablets are prevalent, wearable devices are growing, and the "Internet of Things" is permeating our lives. The number of mobile applications such as Apple Siri, Google Now, and Yelp is rapidly growing, and mobile connectivity is used for everything from Google Glass to vehicle fleet tracking. These applications and services have rapidly enriched our lives, particularly because much of the mobile eco-system is vibrant and conducive to open innovation.

An important part of this ecosystem is the underlying connectivity provided by cellular networks. While innovations in mobile services and applications have thrived, innovations in the underlying cellular systems are more limited. This is partially caused by the closed and monolithic nature of these networks, where the core design and operational challenges are not very accessible to the research community. But there are a large number of stakeholders -- from app developers to smartphone manufacturers to "machine-to-machine" services -- that are increasingly dependent on cellular networks. The goal of this workshop is to bring together network operators, as well as researchers from both industry and academia together to discuss emerging problems, challenges, and potential solutions in this domain.

To facilitate this discussion and engagement, we would like to solicit technical papers, including position papers, that are no more than 6-pages long in the standard ACM two-column, 10 point format. Early work that stimulates discussions are also strongly encouraged. The following is a non-exhaustive list of topics:

- Radio resource allocation and usage profiling
- Cellular network architecture and its evolution
- Understanding and modeling cellular data traffic
- Billing and pricing models
- Cellular network security and privacy issues
- Cellular network management
- Mobility
- Energy efficiency
- Spectrum shortage
- Protocol design
- Algorithms to improve performance and efficiency
- Software-defined networking in cellular networks
- Mobile and wearable applications on cellular networks
- Machine-to-machine services on cellular networks

## **SUBMISSION**

Each submission must be a single PDF file no longer than six (6) pages in length (in two-column, 10-point format) including references. Papers must include the author name and affiliation for single-blind peer reviewing by the program committee. 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.

The submission site is online at <http://cellnet2014.cs.wisc.edu/submission/>

## **ORGANIZATION**

### *Workshop Chairs:*

Kun Tan, Microsoft Research

Jeffrey Pang, AT&T Research

### *Program Committee:*

Sharad Agarwal, Microsoft Research

Rajesh Krishna Balan, Singapore Management University

Suman Banerjee, UW-Madison

Roger Piqueras Jover, AT&T Security Research Center

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