Chairs' Welcome

The ACM MobiCom Workshop on Challenged Networks (CHANTS 2013) is the premier venue for researchers to discuss novel ideas on challenged networks and related topics. In the face of advanced and ubiquitous networking capabilities for more and smaller devices, networked applications need to operate in environments with rather challenging connectivity and networking conditions. These challenges include very high delays, such as in inter-planetary networks, limited power, such as in sensor and wildlife monitoring networks, new communication environments, such as underwater networks, communication in settings that lack infrastructure, such as rural and remote areas, and military battlefields, or simply usual environments (urban, rural) where it is difficult or expensive to use the existing infrastructure (e.g. when roaming). Essentially, challenged networks are found in everyday settings, when access to traditional infrastructure is non-existent, restricted, expensive, overly complex or rapidly changing.

While users strive to communicate in these challenged environments, traditional internet protocol architectures fail to provide effective support. Given the expectation of intermittent connectivity, heterogeneous mix of nodes, nodal churn, and widely varying network conditions, the goal of the challenged network engineer is to design and implement communication algorithms and architectures that specifically target and so operate effectively in this diverse range of conditions.

After the success of the previous Workshop on Delay-tolerant Networking (WDTN-05) and seven previous installments of CHANTS (2006-2012), this year CHANTS takes place jointly with ACM MobiCom 2013 in Miami, Florida, USA.

CHANTS provides an ideal venue for researchers and engineers to present cutting-edge work and results in the field of challenged networks. The workshop solicited papers and demos addressing a number of topics, including delay/disruption-tolerant networking (DTN), opportunistic communication and computing, architectures for challenged networks, case studies involving real challenged network, mobile data offloading, content-centric approaches, and mobile cloud solutions in challenged networking, as well as any other topic relating to the general theme of the workshop.

The call for papers attracted 25 submissions from Asia, Europe, and the United States. The program committee accepted 10 papers that cover a variety of topics, including studies of delay and interference in

We would like to thank the program committee for their hard work in reviewing all the papers to ensure that we could assemble the best possible program for the workshop. In addition, we would like to thank all the authors who have contributed with their work, without which this workshop could not be made possible, as well as the steering committee for their support and guidance.

We hope that you will find this program interesting and thought-provoking and that the workshop will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world.

Thrasyvoulos Spyropoulos
CHANTS 2013 TPC co-chair
Eurecom, France

Anders Lindgren
CHANTS 2013 TPC co-chair
SICS Swedish ICT, Sweden