

CellNet'12 Chairs' Welcome

It is our great pleasure to welcome you to the *2012 ACM SIGCOMM Workshop on Cellular Networks: Operations, Challenges, and Future Design (CellNet)*. With the popularity of smart phones and tablets, we are living in an increasingly mobile world. Mobile applications such as Apple Siri and Foursquare are rapidly growing everyday and greatly enrich our lives. The ecosystem for mobile applications is vibrant and conducive to open innovation. Even one of the most popular mobile OS -- Android operation system is open source. This allows many phone and tablet vendors to innovate on the hardware and firmware. Underpinning this mobile world, it is the cellular networks. Unfortunately, the cellular networks present a rather disheartening picture. They are closed, mostly proprietary, and constructed using closed monolithic equipment. The innovation is limited to a very small number of equipment vendors, not open to the general research community. The closed nature of cellular networks threatens to derail the mobile revolution or limit its true potential.

Research innovation in mobile cellular networks is hampered by the fact that most academic researchers have no access to cellular radios, source codes of cellular network equipment, cellular network management tools, and realistic network traces at scale. As a result, most wireless research is conducted using WiFi. We believe this situation much change. To effect change, this workshop brings network operators, and academic researchers together to address the problems. First, we would like academic researchers to understand operational aspects of cellular networks. Second, we would like researchers from academia and industry to jointly identify the challenges, and propose future designs so that cellular networks can evolve to meet the growing challenges of a mobile world.

CellNet'12 consists of a tutorial, 8 paper presentations, 3 invited talks and a panel. Putting together *CellNet'12* was a team effort. We first thank the authors and invited speakers for providing the content of the program. We are grateful to the program committee, who worked very hard in reviewing papers and providing feedback for authors. Finally, we thank the workshops chairs Dina Katabi and Jitendra Padhye.

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.

Li Erran Li

*CellNet'12 Program Co-Chair
Bell Labs, Alcatel-Lucent, USA*

Zhuoqing Morley Mao

*CellNet'12 Program Co-Chair
University of Michigan, USA*