



University of Luxembourg

Team Meeting

Claudio Fiandrino

November 19, 2015

Education

Computer and Communication Networks Engineering - Politecnico of Torino

- ▶ Bachelor Degree - September 2010
- ▶ Master Degree - November 2012

PhD - 2013

- ▶ Dzmitry Kliazovich
- ▶ Pascal Bouvry
- ▶ Albert Zomaya

Agenda

Performance Metrics for Data Center Networks

Mobile Cloud Computing and Wearables

Mobile Crowd Sensing

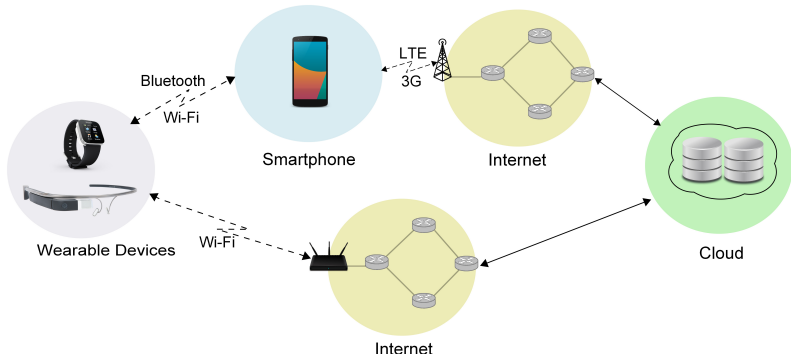
Performance Metrics for Data Center Networks

- ▶ Definition of a framework of metrics
- ▶ Objectives
 - ▶ Compare the performance of different data center networks
 - ▶ Optimize and plan capacity extensions of existing systems
 - ▶ Design efficient future data center networks
- ▶ Ongoing Activities
 - ▶ Implementation on GreenCloud Simulator
 - ▶ Resource allocation scheme
 - ▶ Standardization (context of SmartICT Certificate)



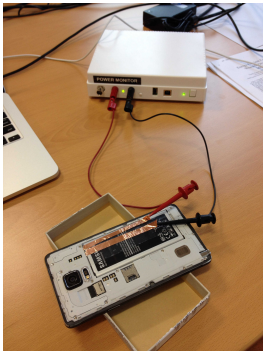
Computation Offloading for Wearable Devices

- General model (paper accepted for GLOBECOM'15)



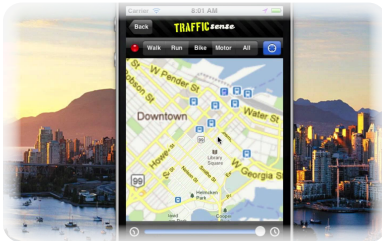
Computation Offloading for Wearable Devices (II)

- ▶ Measures with real devices
- ▶ Development of application for Google Glass



Mobile Crowd Sensing

- ▶ Appealing paradigm for sensing and collecting data
- ▶ Relies on sensors commonly available in mobile devices
- ▶ Context-aware sensing, trade-off
 - ▶ Cost of sensing and reporting
 - ▶ Utility at collector



- ▶ Simulator designed for research use in Mobile Crowd Sensing
- ▶ Properties:
 - ▶ Large scale urban scenarios (OpenStreetMap and Opensignal)
 - ▶ Multiple devices (smartphones and wearable devices)
 - ▶ Mapping events
 - ▶ Opportunistic/Participatory Sensing Paradigms

Thesis... at some point





Thank You!