Mechanisms for Improving Information Quality in Smartphone Sensing Systems

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Abstract - Smartphone sensing is a paradigm that allows ordinary citizens to participate in large-scale sensing surveys by using user-friendly applications installed in their smartphones. Existing smartphone sensing systems depend completely on the participants’ willingness to submit up-to-date and accurate information regarding the events being monitored. Therefore, it becomes paramount to effectively determine, enforce, and optimize the Information Quality (IQ) of the sensing reports submitted by the participants. In this talk, mechanisms to improve and optimize IQ in smartphone sensing systems will be discussed, along with possible future research directions to be explored.

Brief Bio – Francesco Restuccia is a Ph.D. Candidate in Computer Science at Missouri University of Science and Technology, under the supervision of Dr. Sajal K. Das. His research interests include Mobile and Pervasive Computing, Smartphone Sensing, Wireless Sensor Networks, and modeling of complex systems.

Francesco received his M.Eng. and B.Eng. in Computer Engineering (both summa cum laude) from the University of Pisa, Italy, in 2011 and 2009. In Spring 2014, Francesco has been selected and awarded by the National Science Foundation as Entrepreneurial Lead for the I-corps Program. During Summer 2015, he has interned at Driversiti, Inc. as an Algorithms Engineer.