Fast Marginalized Block SBL Algorithm

Benyuan Liu[1], Zhilin Zhang[2], Hongqi Fan[1]

EDICS Category: SAS-MALN

***Abstract*—**

***Index Terms*—**

The main body of IEEE [1] template.

Compressed sensing [2], as an emerging technology, can recover a signal with less measurements given that the signal is sparse or can be sparse represented in some transformed domain. Compressed sensing based wireless telemonitoring technology [3]–[7] can be viewed as a lossy compression. The block diagram of a typical CS-based wireless telemonitoring is shown in Fig. 1.

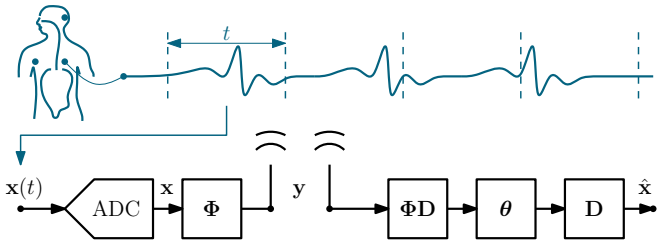

Fig. 1. The diagram of a Compressed Sensing (CS) based wireless telemonitoring system. The physiological signal is collected using the sensors attached on the human body. Under the CS paradigm, the signal can be compressed by multiplying an underdetermined matrix. The compressed signal is then transmitted through a wireless network to the data center. The original signal can be reconstructed using a CS recovery algorithm.

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[1]Benyuan Liu is with The Department of Electrical and Communication Engineering, University of Defense Technology, Changsha, Hunan, 410074, China. e-mail: liubenyuan@gmail.com

[2]Zhilin Zhang is with The Department of Electrical and Computer Engineering, University of California, San Diego, La Jolla, CA 92093-0407, USA. e-mail: zhangzlacademy@gmail.com.

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