

The Second Body Sensor Network Contest

In Conjunction with BSN 2012

Call for Participation

May 10, 2012 London, UK

www.bsncontest.org

Organizing Committee

Roozbeh Jafari UT-Dallas
Louis Atallah, Imperial College London, UK

Expert Contributor:

TBA

Contest Referees

TBA

Advisory Committee

John Lach, U. of Virginia
Majid Sarrafzadeh, UCLA
Jack Stankovic, U. of Virginia
Guang-Zhong Yang, Imperial College

Contest Awards

Academic:
Plaque+\$1000
Industry:Plaque+\$500

Body Sensor Networks (BSNs) have the potential to revolutionize a variety of fields, from medical patient monitoring to recreational sports training. The practical value of current BSNs is hindered by the fact that the signal processing for the collected sensor data is often designed only for specific data sets, BSN platforms, and applications. Due to inevitable variations in hardware, software, and experiment design, it is extremely challenging for BSN researchers and developers to **reproduce and verify** or **demonstrate improvement** over results reported by others. Additionally, due to variations in sensor placement and orientation, it might be difficult to later **extend and reuse** existing data sets. All this suggests an urgent need to develop signal processing techniques capable of handling multiple, possibly non-standard, data sets collected on various patient populations using disparate BSN platforms following a variety of experimental protocols. This goal can be best realized through sharing of existing data and tools in the research community. In addition, **data sharing** can significantly strengthen the value of statistical signal processing results, provide important insight into data collection and storage issues not raised using individual tools, and eventually help shape a data standard for the community.

The competition aims to:

- 1) Promote data sharing and reuse in the BSN field.
- 2) Explore the issues of signal processing applied to multiple non-standard data sets.
- 3) Encourage development of light-weight and robust signal processing and decision making techniques that guide the user to gain better access to the relevant information.
- 4) Help shape an eventual data standard.

The organizers will solicit feedback about the experiences that contestants had while developing the signal processing techniques for the multiple data sets, and the feedback will later be made publically available online, along with an executive summary of the contest.

CONTEST REGISTRATION

Team Registration is Due: March 15, 2012

Initial Data Set Release Date: April 1, 2012

Contest Date: May 10, 2011

Sponsored by:



For information on contest description and rules, please refer to contest website: <http://bsncontest.org>

Both **Academic** and **Industrial** teams are encouraged to participate. The best team in each category will be awarded a cash prize and a plaque.