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2016 IEEE International Symposium on



Medical

MAY 16 - 18, 2016 and Applications **BENEVENTO ITALY**



CALLFORPAPERS FORTHESPECIAL SESSION **RECENT ADVANCES IN NON-INVASIVE BLOOD PRESSURE MEASUREMENT**

ABSTRACT

Hypertension is a very common ailment that represents a primary risk factor for heart disease, stroke, and kidney disease. As such, blood pressure is one of the most commonly measured vital signs and modern automated non-invasive blood pressure measurement devices are widely used in the clinic for patient assessment and management, and in the home for personal health monitoring. However, these devices still suffer from significant deficiencies related to accuracy, robustness, and patient comfort. Moreover, most available devices only provide occasional snapshots of the state of the cardiovascular system, which in reality is constantly changing over time scales ranging from a few heartbeats to much longer durations. In recent years, there have been a number of exciting developments that promise to make significant improvements to this important measurement. This special session aims to survey the current state-of-the-art, provide a forum for reporting some of the important recent advances, and provide a venue for discussion and interaction between engineers and clinicians that will hopefully lead to new productive research directions in non-invasive blood pressure measurement.

All the papers reporting about research related to the above-mentioned topics are welcome.

CHAIRS



Voicu Groza

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Dr. Voicu Groza's (IEEE M'97-SM'92-F'11) current research interests include biomedical instrumentation and measurements, high speed data acquisition systems and reconfigurable computers. He has published more than 250 technical papers, authored two books, and received two patents. Dr. Groza has held leadership roles on the organization and technical program committees of numerous international conferences. He has been volunteering in the frame of the IEEE Instrumentation and Measurement Society both at the Ottawa chapter and at the worldwide society administration level. He is a Fellow of the Engineering Institute of Canada.



Hilmi Dajani

School of Electrical Engineering and Computer Science University of Ottawa, Canada hdajani@site.uottawa.ca

Dr. Hilmi Dajani (M'07-SM'11) has 20+ years of experience in developing systems for measuring and analyzing various physiological signals. Dr. Dajani's area of expertise is in applied signal processing and instrumentation for biomedical applications, and his research interests include developing new approaches for assessing cardiovascular and respiratory function.



Miodrag Bolic

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Dr. Miodrag Bolic's (M'04-SM'08) research interests include biomedical signal processing and instrumentation, hardware/software accelerators, and Internet of Things. His current biomedical research is related to blood pressure monitoring, transcranial direct current stimulation and physiological sensing using radars.

BENEVENTO

Benevento, due to the Santa Sofia's Church with its Cloister, has been part of UNESCO World Heritage Sites as "Longobards in Italy. Places of the power".



MORE INFO

For further information, please visit MeMeA2016 website at

memea2016.ieee-ims.org

TOPICS

Paper submissions on all areas of non-invasive blood pressure measurement are welcome. Topics of interest include but are not limited to:

- Recent advances in automated methods
- Quality assurance and calibration
- International standards
- Continuous beat-by-beat measurement methods
- Measurement of central blood pressure and
- estimation of arterial stiffness
- Combination of blood pressure measurement with other vital signs
- Blood pressure measurement during sleep
- Future trends

DATES

January 17, 2016 - Submission of Final Paper (5-6 pages) - first version

March 10, 2016 - Submission of revised Final Paper

April 4, 2016 - Final Submission, Registration



Prospective authors must electronically submit a final paper (5-6 pages, including figures) by January 10, 2016, by pointing out the related Special Session.

All papers will receive multiple peer reviews; authors will receive timely notification of paper acceptance. If accepted, final papers must be no more than 6 pages and will be submitted electronically.

Papers must be presented at the conference orally by an author, will appear in the final conference proceedings, and will be indexed in the Scopus citation index.