Call for Papers

Focused Section on Sensing Technologies for Biomechatronics

Recent advances in sensing technology have produced exciting new ideas in the growing field of biomechatronic devices. The successful integration of such devices requires thorough understanding of not only mechanical and electrical components, but also related physiology, biology, and neuroscience. This Focused Section of the IEEE/ASME Transactions on Mechatronics (TMECH) is dedicated to the new advances in modeling, design, fabrication, analysis, implementation, and validation of such sensors and related technologies for biomedical applications. Multidisciplinary papers are encouraged to submit. Potential topics include but are not limited to:

- Novel sensing principles
- Novel calibration techniques
- Biologically inspired sensors
- Sensors for biomedical applications (rehabilitation, healthcare monitoring, etc)
- In-vivo measurement of cells
- Measurement of bio-signals (EMG, EEG, MEG, etc)
- Wearable sensors
- Motion capturing
- Ultrasonic imaging
- MRI/fMRI compatible sensors
- Stereo or multiple vision systems
- Chemical sensors
- MEMS sensors

Manuscript Submission

Please submit the manuscripts in PDF format to http://mc.manuscriptcentral.com/tmech-ieee, and indicate on your cover letter that “This paper is submitted for possible publication in the Focused Section on Sensing Technologies for Biomechatronics.” Instructions for authors are available online at: http://www.ieee-asme-mechatronics.org. The papers should contain both the theoretical and practical/experimental results and are subject to the TMECH review procedures. If you have any questions relating to this Focused Section, please email one of the guest editors.

Important Dates:

- November 1, 2010: Paper Submission
- February 1, 2011: Completion of First Review
- March 15, 2011: Submission of Revised Paper
- June 1, 2011: Completion of Final Review
- July 1, 2011: Submission of Final Manuscripts and Copyright Forms
- October 2011: Publication

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