Ninth Annual

IEEE Signal Processing in Medicine and Biology Symposium (SPMB19)

Saturday, December 7, 2019

Temple University, Philadelphia, Pennsylvania

IEEE SPMB19 is a regional symposium intended to provide a highly interactive forum where bioengineering and signal processing researchers can collaborate on emerging trends in signal processing. We expect approximately 125 researchers to attend. We specifically encourage graduate students to attend and present their thesis or dissertation research. This is an excellent opportunity to network with leading professionals in your field and to form new collaborations.

Signal processing plays a vital role in applications ranging from medical electronics to data mining of electronic medical records. The enormous amounts of data that can be acquired from devices are enabling a new generation of technology based on big data. This symposium is intended to bring together a wide range of professionals interested in applications of signal processing medicine and biology. The symposium is sponsored by IEEE-USA, IEEE Region 2, IEEE Region 2 Philadelphia Section, Temple University, the Neural Engineering Data Consortium and NYU Polytechnic School of Engineering.

The symposium will consist of two plenary talks, two oral sessions and two poster sessions. Exhibits and demonstrations are encouraged as well. Interested parties should contact the conference organizers at help@ieeespmb.org for further details. Please consult our conference archive for additional information about the history of this conference.

Symposium Topics:

Traditional signal processing topics include:

- Signal analysis (e.g., EEG, ECG, EMG)
- Medical imaging (e.g., MRI, fMRI)
- Machine learning, data mining and classification
- Big data resources and applications
- Signal processing methods in bioinformatics
- Linear, nonlinear, and adaptive filtering and prediction
- Time-frequency and non-stationary signal analysis

Applications of particular interest this year include:

- Electronic medical records
- Wearable healthcare devices
- Data mining and analytics in healthcare
- Security and reliability in wireless medical technologies
- Biomedical nanosensors and wireless technologies
- Biomedical instrumentation and electrical stimulation

If you have questions about the relevance of a planned submission, feel free to contact the technical committee at help@ieeespmb.org for guidance.

Paper/Abstract Submission:

Presenters may choose to submit to one of two peer-reviewed tracks:

(1) Paper: An original four to six-page paper for oral presentation.
(2) Poster: A one-page abstract that will be presented as a poster.

All papers and abstracts are indexed in IEEE Xplore (search for "IEEE SPMB").

Papers/abstracts can be submitted via email to submit@ieeespmb.org. Contributions must follow the approved conference formats. See IEEE SPMB Guidelines for more information.

Important Dates:

Paper Submission	July 1, 2019
Notification	Oct. 1, 2019
Paper Revisions	Nov. 1, 2019
Early Registration	Nov. 15, 2019
Final Program	Dec. 7, 2019

Organizing Committee:

General Chairs:
Joseph Picone (Temple)
Ivan Selesnick (NYU-Tandon)

Technical Program Chair:
Silvia Lopez (Blackfynn)

Program Chairs:
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Sean Ferrell (Blackfynn)
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Web: http://www.ieeespmb.org/2019
Contact: help@ieeespmb.org