Special Session Proposal Template
Deadline: August 31, 2016

This document is a template for all the information relevant to an invited special session proposal for BHI 2017. Invited special sessions will feature invited talks and panel discussions from leading researchers covering recent trends on a specialized topic in multi-disciplinary and cross-disciplinary areas of biomedical and image informatics, behavioral informatics, sensor informatics, life science discovery, public health and clinical innovations, health analytics and informatics education. Non-technical talks on topics such as research funding, entrepreneurship, or technology transfer may also be included. Invited special sessions will be scheduled under a Conference Theme and Track with 90 minute time slots during the conference. A typical invited session should consist of a combination of 3-6 invited talks and a panel discussion.

The following template should be filled and **submitted in PDF**, by the deadline, to Konstantina Nikita (knikita@ece.ntua.gr) and Bahram Parvin (b_parvin@lbl.gov).

IMPORTANT: please read carefully the guidelines at the end of the template.

- **Organizers' Names**

Organizer 1 (main contact person)	Organizer 2
Kathy Grise	

- **Organizers' Affiliations (include postal address and phone number)**

Organizer 1 (main contact person)	Organizer 2
IEEE Future Directions 445 Hoes Lane, Piscataway, NJ 08854 USA 732-981-2871	

- **Organizers' Email Addresses**

Organizer 1 (main contact person)	Organizer 2
k.l.grise@ieee.org	

- **Organizers' CVs (up to 200 words)**

Organizer 1 (main contact person)	Organizer 2

Senior Program Director - IEEE Future Directions, supports new technology initiatives, and is the IEEE staff program director for the Big Data Initiative, Smart Materials Initiative, the IEEE Technology Navigator, and manages the digital presence team for Future Directions. Prior to joining the IEEE staff, Ms. Grise held numerous positions at IBM, and most recently was a Senior Engineering Manager for Process Design Kit Enablement in the IBM Semiconductor Research and Development Center. Ms. Grise led the overall IT infrastructure implementation, and software development in support of semiconductor device modeling verification, packaging, and delivery; device measurement and characterization data collection and management, and automation for device modeling engineers. Ms. Grise is a graduate of Washington and Jefferson College, and an IEEE Senior member.	

- **Session Title**

Power and Veracity of Data Analytics for Informed Decision Making

- **Motivation and Context (up to 10 lines)**

    Please explain why you think that the proposed topic is suitable for a special session at BHI 2017

Data Science is all about the processes and methods to access and analyze data to gain insights for informed decision making. To promote the awareness and analytic technology of Big Data, IEEE EMBS and the IEEE Big Data Initiative are hosting a Data Analytics Competition. Complementing the competition, a panel of experts from industry and academia will share their insights and perspectives as it relates to the power and learning that could be harvested from data. Equally important considerations are the data itself.

- **Structure (up to 10 lines)**

    Please describe the format for the special session, identifying the inclusion of keynote speakers, panel, and the number of invited papers.

The format comprises of a panel of experts from industry and academia. Each panellist will speak relating from their specific backgrounds and expertise. The range of technologies from telecommunications, biomedical health, power smart grid, and consumer.

Invited speakers to include:

David Belanger: currently a Senior Research Fellow at Stevens Institute of Technology. In this role he continues his work in Big Data Technology, Applications, and Governance. He teaches and is a leader in the Business Intelligence & Analysis Master's Degree program. In addition, he is involved in consulting related to Big Data in areas suchas Telecommunications Services, Health Care, Security, and Networking. He leads the IEEE Big Data Initiative (bigdata.ieee.org); and is on the steering committee of the New Jersey Big Data Alliance (njbigdata.org).

Prior to this role, Dr. Belanger was Chief Scientist of AT&T Labs, and Vice President of Information, Software, & Systems Research at AT&T Shannon Labs in Florham Park, NJ. The Information, Software & Systems Research Lab conducted research in: large scale and real time information mining related to operations of a (communications) service business; interactive, information visualization; scalable, dependable software systems; and new, information based, communications services. It was also responsible for delivery and operations of very large scale (e.g. petabyte), near real time service management capabilities to AT&T, and its customers, as well as a wide variety of analytic and information mining services. He was the creator of the AT&T InfoLab, an organization aimed at optimizing the value gained from data for AT&T. InfoLab was a very early participant in "Big Data" research and practice. It performed data oriented projects across the spectrum of telecommunications services including: networking, mobility, operations, customer interactions, services, and fraud/security.

Accomplishments ranged from revolutionizing the corporate fraud systems and systems for measuring customer experience for each customer in the Mobility Business, to winning the Netflix Prize in 2009. They also included the development of world class tools used in Big Data. As Chief Scientist, he interacted with customers, suppliers, and government to articulate the company's technological directions.

Andrew Laine: received his D.Sc. degree from Washington University (St. Louis) School of Engineering and Applied Science in Computer Science, in 1989 and BS degree from Cornell University (Ithaca, NY). He was a Professor in the Department of Computer and Information Sciences and Engineering at the University of Florida (Gainesville, FL) from 1990-1997. He joined the Department of Biomedical Engineering in 1997 and served as Vice Chair of the Department of Biomedical Engineering at Columbia University since 2003 - 2011. He is currently Chair of the Department of Biomedical Engineering and Director of the Heffner Biomedical Imaging at Columbia University and the Percy K. and Vida L. W. Hudson Professor of Biomedical Engineering and Professor of Radiology (Physics). He has served on the program committee for the IEEE-EMBS Workshop on Wavelet Applications in Medicine in 1994, 1998, 1999, and 2004. He was the founding chair of the SPIE conference on "Mathematical Imaging: Wavelet Application in Signal and Image Processing", and served as co-chair during the years 1993-2003. Dr. Laine has served as Chair of Technical Committee (TC-BIIP) on Biomedical Imaging and Image Processing for EMBS 2004-2009, and has been a member of the TC of IEEE Signal Processing Society, TC-BISP (Biomedical Imaging and Signal Processing) 2003-present. Professor Laine served on the IEEE ISBI (International Symposium on Biomedical Imaging) steering committee, 2006-2009 and 2009 – 2012. He was the Program Chair for the IEEE EMBS annual conference in 2006 held in New York City and served as Program Co-Chair for IEEE ISBI in 2008 (Paris, France). He served as Area Editor for IEEE Reviews in BME in Biomedical Imaging since 2007-2013. He was Program Chair for the

EMBS annual conference for 2011 (Boston, MA). Professor Laine Chaired the Steering committee for IEEE ISBI, 2011-2013, and Chairs the Council of Societies for AIMBE (American Institute for Medical and Biological Engineers). Finally, he served as the IEEE EMBS Vice President of Publications 2008 – 2012, and Past President of IEEE EMBS (Engineering in Biology and Medicine Society), 2015 - 2016.   He is a member of the IEEE Big Data Initiative. He is a Fellow of IEEE and AIMBE.

Narisa Nan Chu: worked in AT&T Bell Labs, Rockwell International, Tellabs, Comcast, Motorola, Verizon and Thomson/DirecTV in her career of 30+ years, performing roles of Technologist/ Manager/ Director of Advanced Technology/Standards/Product Development in Telecommunications Systems and Software. Of noted contribution was her role in sponsoring the digital set-top box standards to become world standards through the US delegate team to the UN-ITU, the International Telecommunications Union, Study Group 9. Throughout her industry career, she has also forged academia collaborations by adjunct teaching in University of Illinois - Chicago, Widener University, California Lutheran University and DeVry University, as well as being the Director of Research & Services in California State University – Northridge. She has started 2 companies including CWLab International, among other high-tech entrepreneurial activities in southern California and internationally.

Her professional volunteering services with IEEE started in 1983, having led the Communications Society Chapter in Chicago, Engineering Management/Social Implications of Technology Chapter in Philadelphia, Computer & Communications Chapter in San Fernando Valley, and Sections OpCom, with several recognitions of outstanding Chapter/Section awards under her leadership. She was the Executive Chair of IEEE Consumer Electronic Society sponsored Conference on International Games Innovation in 2011, Industry & Exhibition Chair for GLOBECOM 2012, Executive Vice Chair of GLOBECOM 2015, also serving on Technical Program Committees of many other Conferences sponsored by IEEE and ACM.

Trained in Nuclear Engineering, her career in the nuclear industry was short-lived. Her career in telecom and networking software has been much longer lasting with continuous impact throughout the United States and internationally.

Kathy Grise

- ## **Conference Theme & Track**

    Please indicate the best suited theme and track under which your proposed special session should be scheduled; refer to the corresponding list at the conference web site.

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- ## **Papers (3-6)**

    Please make a preliminary suggestion of authors and tentative paper titles.

Author(s)	Affiliation, Country	Tentative paper title

- **Expected Number of Attendees**

List of Potential Reviewers

Please provide a list of potential reviewers; at least as many as the number of papers but preferably more.

Name	**E-mail**	**Affiliation, Country**

Guidelines for Special Sessions

Rules for Organizers

The proposal must be submitted using the template that includes a mandatory provisional list of authors, **no later than the deadline (August 31, 2016)**. Please submit the template **in PDF** to Konstantina Nikita (knikita@ece.ntua.gr) and Bahram Parvin (b_parvin@lbl.gov).

Selection Criteria for Proposals

The selection process of invited special session proposals will be based on a set of criteria:

- Qualifications of the solicited authors.
- Topic of the proposed session, taking into account the scientific content, the timeliness of the topic, the level of expected audience.
- Existence of competing proposals.

Paper Submission and Review

All submissions in invited sessions will be required to follow the 1-page paper format and the corresponding submission deadline (December 20, 2016). One-page submissions will undergo review and will be included in the digital program, but they will not appear in IEEE Xplore Proceedings. Although there is no requirement for the 4-page paper format, authors of invited session papers may choose to proceed in a submission using the 4-page format (in addition to their 1-page submission), following the guidelines for regular submissions and the corresponding deadline (October 15, 2016). Four-page paper submissions will be included in IEEE Xplore Proceedings. Invited papers will be reviewed by one of the special session organizers not associated with the authors' institutions and by other reviewers.