



Call for Papers GENSIPS'2009



Interdisciplinary Forum on Genomic Research for Engineers and Scientists

IEEE International Workshop on Genomic Signal Processing and Statistics

Minneapolis, Minnesota

May 17–19, 2009

<http://www.gensips.org>

Recent advances in genomic studies have stimulated synergistic research in many cross-disciplinary areas. Genomic data presents enormous challenges for signal processing and statistics, which has led to the development of the new field of Genomic Signal Processing (GSP). The seventh IEEE International Workshop on Genomic Signal Processing and Statistics will provide an international scientific forum devoted to the area of GSP and its applications in system biology and medicine. The aim of the workshop is to address the emerging need for discovery in genomic research by interdisciplinary collaboration among researchers from a wide array of disciplines including signal processing, computer science, statistics, biology and medicine.

AREAS OF INTEREST

Topics of interest to the conference include:

- Cellular modeling and metabolism
- Complex biological systems
- Computational biology and bioinformatics
- Computational genomics and epigenomics
- Controls and systems theory
- Data mining and pattern recognition
- Drug design and therapeutics
- Gene expression and microarray analysis
- Hardware and software systems
- Information theory and communications
- Machine learning and graphical methods
- Mathematical and theoretical biology
- Micro RNA and RNAi
- Molecular and systems biology
- Molecular dynamics and simulation
- Molecular evolution and phylogeny
- Molecular structure and interaction
- Mutations and disease
- Parallel processors and algorithms
- Pathways and regulatory genomic networks
- Personal Sequencing
- Sequence alignment and profiling
- Sequence and time-series analysis
- Signal processing and statistical analysis
- Statistical inference and estimation
- Stochastic and structural modeling
- Structural and functional genomics
- Visualization, retrieval and classification

SUBMISSION PROCEDURES

Prospective authors are invited to submit papers electronically through the conference website. All submissions must follow the formatting instructions specified on the website. All papers will undergo a thorough review process and acceptance of papers will be based on appropriateness of the topic, quality, novelty, and clarity of exposition.

IMPORTANT DATES

January 30, 2009	Four-page papers due
March 15, 2009	Accept/reject notifications sent out
April 15, 2009	Final four-page camera-ready papers due
May 17- 21, 2009	Workshop

VENUE

GENSIPS'2009 will be held at the Radisson University Hotel in Minneapolis, Minnesota, which is located in the heart of the University of Minnesota campus, less than one mile from downtown Minneapolis and the Metrodome and nine miles from downtown St. Paul.

ORGANIZING COMMITTEE

General Chair: **Ahmed Tewfik**, University of Minnesota

Technical Program Chair: **Dan Schonfeld**, University of Illinois at Chicago

Tutorial Chair: **Haris Vikalo**, University of Texas at Austin

Plenary Speaker Co-Chairs: **George Karypis**, University of Minnesota; **Gaurav Sharma**, University of Rochester

Special Session Chair: **Nevenka Dimitrova**, Philips Research

Finance Chair: **Marc Riedel**, University of Minnesota

Publication Chair: **Ulisses Braga-Neto**, Texas A&M University

Publicity Chair: **Nidhal Bouaynaya**, University of Arkansas at Little Rock