



International Conference on Bioinformatics and Systems Biology



BSB-2018

26th-28th October 2018

Organized by

Indian Institute of Information Technology - Allahabad

(A center of excellence in Information Technology and allied areas, Govt. of India)

Co-sponsored by



About IIT-Allahabad

The Indian Institute of Information Technology Allahabad (IIIT-A) was established in 1999, as a center of excellence in Information Technology and allied areas. The institute was conferred the “Deemed University” status by Govt. of India in the year 2000. The Institute has been conceived with the ambitious objectives of developing professional expertise and skilled manpower in Information Technology (IT) and related areas. As an apex nucleating institute in the area of IT, the establishment of IIIT-A, is a major step of Govt. of India towards strengthening the indigenous capability necessary for exploiting profitably and harnessing multi-dimensional facets of IT at all levels, and attaining expertise to enable the country to emerge as a leading player in the global arena.

About the Conference

Recent advancements in genomics and proteomics technologies in the post-genomic era, especially the high throughput Next Generation Sequencing (NGS) technology are producing an enormous amount of biological data. The analysis and annotation of these voluminous data poses a challenging task for experimental scientist and researcher across the globe. However effective data structures, cloud computing, big data analytics and several NSG pipeline tools were being proposed in recent years to tackle such mammoth task utilizing plethora of pattern recognition, signal processing, string analysis and data mining techniques to accurately interpret and annotate these biological and to generate a system level simulation bed for deciphering the overall molecular mechanism of biosystem.

This proposed International conference (**BSB-2018**) will be helpful to bring together the leading academician, researchers, and scholars across the globe to facilitate a better understanding and integration of latest Bioinformatics and Systems Biology methods in NGS field. This will propel the developments of new tools and techniques in Bioinformatics and Systems Biology in the field of NGS. Further, the Workshop on Systems Biology (**WSB-2018**) will give a hands-on experience about the recent trends in NGS tools and techniques, for educating and enabling researcher from academia and scientific industries.

Conference Track

The topics should include but are not limited to the following series of conference tracks

Track-1: Genomics (Structure, Function, and Evolution)

Next Generation Sequencing (NGS) and Metagenomics, Genomic evolution, Phylogeny, Comparative Genomics, Functional Genomics, Gene Regulation, Alternative Splicing, Genetic Network Analysis, DNA, RNA Sequence Analysis, Gene Expression Analysis

Track-2: Proteomics (Structure, Function, and Dynamics)

Protein Structure modeling, Protein Network, Protein Structural Dynamics study, Annotation of Hypothetical protein, Functional and Structural Annotation, Docking, Molecular Dynamics, Active Site Prediction, Protein Folding, Protein Sequence Analysis

Track-3: Computational Systems Biology

Transcriptomics, Microarray Data Analysis, Network/Pathway Analysis, Protein-Protein Interaction, Metabolomics, Epigenomics, ncRNA Prediction and Analysis, DNA Methylation Analysis, Pathway Simulation and Modeling

Track- 4: Biological Data Mining and Analytics

Biological Data Mining, Ontology, Machine Learning and Prediction, Biological Data Visualization, Computational Modeling and Data Integration of Bio-system, High-Performance Computing, Big Data Analytics, Pipelines, and Tools, Bio-inspired Computing.

Track- 5: Cognitive Computing

Complex Data Mining, Ontology, Multimodal Machine Learning, Computational Modeling and Data Integration of Neural System, Cognitive models, Deep Learning and Reinforcement Algorithm, Neural Computing.

Call for paper

Prospective authors are invited to submit original research papers in electronic format through Easy Chair (<https://easychair.org/conferences/?conf=bsb2018>). Unregistered authors should first create an account on Easy Chair to log on. All submissions must be in English language only. Papers submitted should comply with the IEEE format, specifications guideline. The manuscript submitted to BSB-2018 should be prepared with general headings like: Title, Name of authors, Institutional address, Email ID, Mobile Number, Abstract, Keywords, Introduction, Materials and Methods, Result and Discussion, Conclusion, Acknowledgment and References. Authors are requested to submit full paper (Maximum 4 pages, double-column A4) using the IEEE conference template. The IEEE paper template can be downloaded from following link: http://www.ieee.org/conferences_events/conferences/publishing/templates.html

All papers that conform to submission guidelines will be peer reviewed and evaluated based on originality, technical and/or research content/depth, correctness, relevance to conference, contributions, and readability. Acceptance of papers (both oral presentation and poster presentation) will be communicated to authors by email. Accepted papers after the review and presentation in the conference will be included in the proceedings of BSB 2018 in IEEE Xplore Digital Library (www.ieeexplore.org). The short listed papers will be called for oral presentation whereas few may be invited for poster presentation. If selected for poster presentation: Manuscript accepted as poster will be notified to the author for poster presentation. The poster size should be of 36 x 48 inches preferably, which will be exhibited at the conference venue. The poster should carry the context of the study along with major findings and results therein.

Important Dates

| | |
|---|-------------------------|
| Call for Paper (Paper submission on Easy Chair): | 15th November, 2017 |
| Last date for submission of paper: | 15th April 2018 |
| Registration start: | 30th June, 2018 |
| Acceptance notification to authors: (With suggestion for Journal layout) | 15th June, 2018 |
| Last Date of Registration: | 15th August 2018 |
| Camera ready version submission last date: | 15th August 2018 |
| Conference Date: | 26th-28th October, 2018 |
| Workshop Date: | 28th October 2018 |

For further enquiry please contact:

Conference Secretariat, BSB-2018 & WBS-2018

Indian Institute of Information Technology-Allahabad, Jhalwa, Allahabad, 211015, India

Mobile: +91-9415264599,

Office: +91-532-292-2219/2200

Email: conference.iiita@gmail.com