



**IEEE Conference Record No. 44302**

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## **PDGC-2018**

2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC) will be organized at Jaypee University of Information Technology, Wagnaghat, Solan, Himachal Pradesh, India. PDGC-2018 will serve as an international forum for researchers and practitioners interested in recent advances in the areas of parallel, distributed and grid computing. It will provide an opportunity to present and exchange advanced scientific and technological information in hardware, software and theoretical foundation in these areas. The proceedings of PDGC 2018 will appear in the proceedings published by IEEE and fully indexed by IEEE Xplore (**IEEE Conference Record No. 44302**). 1st best paper, 2nd best paper and 3rd best paper award will be given.

### **Venue**

Jaypee University of Information Technology is located at Wagnaghat, Solan, Himachal Pradesh 173234, India. It is situated near Shimla (24 Km) just 3 Km off the NH22 (Delhi-Ambala-Kalka-Wagnaghat-Shimla road). Convenient airports are Shimla (30 Km), Chandigarh (100 Km), New Delhi (350 Km) and Amritsar (350 Km).

## **SPECIAL SESSION ON “LATEST TRENDS OF DATA SCIENCE APPLICATIONS IN BIOMEDICAL ENGINEERING”**

### **SESSION CHAIR**

Dr. Shipra Saraswat

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### **SESSION CHAIR**

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## AIMS & SCOPE

Data science is a "concept to unify statistics, data analysis, machine learning and their related methods" in order to "understand and analyze actual phenomena" with data. It employs techniques and theories drawn from many fields within the context of mathematics, statistics, information science, and computer science. Biomedical engineering (BME), also known as bioengineering, is the application of engineering principles and design concepts to medicine and biology for healthcare purposes (e.g. diagnostic or therapeutic). This field seeks to close the gap between engineering and medicine, combining the design and problem solving skills of engineering with medical biological sciences to advance health care treatment, including diagnosis, monitoring, and therapy.<sup>[1]</sup> Also included under the scope of a biomedical engineer is the management of current medical equipment within hospitals while adhering to relevant industry standards. This involves equipment recommendations, procurement, routine testing and preventative maintenance, through to decommissioning and disposal. This role is also known as a Biomedical Equipment Technician (BMET) or clinical engineering. Biometrics is the technical term for body measurements and calculations. It refers to metrics related to human characteristics. Biometrics authentication (or realistic authentication)<sup>[note 1]</sup> is used in computer science as a form of identification and access control.<sup>[1][2]</sup> It is also used to identify individuals in groups that are under surveillance. This session focuses on the applications of data science in biometrics and biomedical field. It will definitely promote researchers of the related fields by publishing their research work and will be an exciting platform for discussion.

**PUBLICATIONS:** All the accepted paper after the oral presentation during the conference will be submitted to IEEE Xplore. **IEEE Conference Record No. 44302**

### **PUBLICATION:**

**All the accepted and presented papers (after double blinded peer review) will be submitted to IEEE Xplore for publication.**

**Conference Indexing: SCOPUS.**

### **Important Dates:**

Submission of Full Papers Deadline	30 <sup>th</sup> September, 2018
Notification of Acceptance Deadline	15th October, 2018
Submission of Accepted Camera-Ready Papers Deadline	30th October, 2018
Author's Registration Deadline	15th November, 2018
Conference Dates	20-22 December, 2018

### **TOPICS OF INTEREST**

Full length original and unpublished research papers based on theoretical or experimental contributions related to the below mentioned tracks are invited for submission in this special session:

#### **Tracks: (Sub-Themes)**

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- Regression/Classification
- Time series forecasting
- Segmentation/Clustering/Association
- Deviation and outlier detection
- Explorative and visual data mining
- Web mining
- Data cleaning and preparation
- Feature selection and transformation
- Attribute discretisation and encoding
- Sampling and rebalancing

Missing value imputation  
Model selection/assessment and comparison  
Induction principles  
Model interpretation  
Biomedical signal processing  
Medical big data and machine learning  
Application of artificial intelligent for biomedical signal processing  
Signal quality assessment for dynamic data monitoring  
Analysis of ECG, PCG, EEG, EMG, blood pressure, pulse, respiration and sleep signals  
Telemedicine, mobile health and internet of things technologies in medical applications  
Clinical applications for chronic illnesses detection  
Rehabilitation engineering and clinical engineering  
Wearable device and signal processing  
Biomedical instrumentation and sensors  
Medical information technology  
Other related topics

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### **PAPER SUBMISSION PROCESS:**

Paper Submission Process:

**Please submit your paper (in word/pdf format) at following emails:**

Email: [sshipra1510@gmail.com](mailto:sshipra1510@gmail.com) with Subject Line 'Research Paper for Special Session PDGC- 2018' from your email.

You may upload the paper through easy chair on the conference website. Details are as follows;

[http://www.juit.ac.in/pdgc-2018/paper\\_submission.php](http://www.juit.ac.in/pdgc-2018/paper_submission.php)

For any further queries related to this special session, please contact the session chair at:

Email ID: [sshipra1510@gmail.com](mailto:sshipra1510@gmail.com)

### **Technical Program Committee (TPC):**

#### **List of Members from India & Abroad:**

1. Prof. K. V. Arya, Dean (PG and Research), AK technical University, Lucknow.
  2. Dr. Norbert Marwan, Potsdam Institute for Climate Impact Research, Germany.
  3. Dr. Pivtra Mitra, Professor, IIT, Kharagpur.
  4. Dr. S. D. Roy, Professor, IIT, Delhi.
  5. Dr. Vishal Sharma, Soonchunhyang University, Asan, South Korea
  6. Dr. Zubair Khan, Associate Professor, Taibah University Medina, Saudi Arabia
  7. Dr. Praveen Kumar Poonia, CAS, Sur, Oman
  8. Dr. Dhananjay Singh, Assistant Professor, Hankuk University for Foreign Studies, Korea
  9. Dr. Baseem Khan, Assistant Professor, Hawassa University, Institute of Technology, Ethiopia
  10. Dr. Uday Shankar, Professor and Dean, MMM University, Gorakhpur.
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### **Publication Policies:**

1. All registered and presented papers/review articles shall be submitted to IEEE Xplore for their possible publication in a Conference Proceedings format (online). However the right to accept and subsequent publication of each will be with IEEE Xplore that will be decided on the basis of the quality novelty of work and the originality of the text, the manuscript will represent.

2. In case, any registered paper/article is rejected by the IEEE Xplore for its publication with their conference proceeding due to any reason (mentioned at point number-01), the sole responsibility shall lies with authors of that article. As we clearly stated on the first and home pages, that IEEE Xplore will conduct quality checks on the accepted papers and only papers that pass these checks will be published.

Therefore authors are expected to avoid to use similarity text (copy and paste from other published works), should adhere to original work maintaining technical and result description qualities. Also authors will not allow to make changes in the choice of publication category (I or II) once registered and pay the fee as per category wise.

3. Paper/article length is limited upto 6 pages only. Extra pages are to be avoided, if necessary, author can place a request in advance with payment of separate fee (page-wise) as mentioned in the registration link.