## 2015 IEEE WORKSHOP ON COMPUTATIONAL INTELLIEGENCE THEORIES, APPLICATIONS AND FUTURE DIRECTIONS

### (IEEE WCI - 2015)

Dec 14<sup>th</sup> -17<sup>th</sup>. 2015

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# INDIAN INSTITUTE OF TECHNOLOGY KANPUR

Advancing Technology for Humanity

IEEE Uttar Pradesh Section Computational Intelligence Society Chapter invites submissions of substantial, original, and previously unpublished research work in IEEE Workshop on Computational Intelligence (IEEE WCI 2015). Computational Intelligence (CI) is a set of biological and linguistic tools and methodologies to address complex real-world problems to which traditional approaches may not be very effective. Major constituents of CI are neural networks, evolutionary algorithms, fuzzy systems, and hybrid intelligent systems. The workshop is meant to discuss the state-of-the-art developments, challenges and unsolved open problems in the field of CI. It will also provide a platform to students, scientists, faculty members and research professionals to interact, present and get reflections on their work.

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- \* Neural Networks
- Evolutionary Algorithms  $\diamond$
- Genetic Algorithms ٠
- Fuzzy Knowledge Systems \*
- Type-2 Fuzzy Sets •••
- **Optimization Algorithms** •••
- ••• Neuro-Fuzzy Systems
- \* Industrial Applications of CI
- \* **Big Data Analytics**
- $\diamond$ Intelligent Social Informatics
- \* Data mining and Visualization
- \* **Bioinformatics**
- \* Industrial Sensing Intelligence
- ••• Intelligent Information Retrieval
- ••• Gesture Identification and Recognition
- \* **Object Identification and Scene Analysis**
- \* Pattern Recognition
- Image and Video Processing ٠.
- \* Game Theory

#### Conference Highlights – Keynote Speeches

- Prof. Nikhil R Pal, Vice President for Publications, IEEE CIS, ISI Kolkata
- Prof. Sankar Pal, Distinguished Scientist and Former Director, ISI Kolkata
- Prof. J. Sarangapani,,Missouri University Of Science & Technology, USA
- Prof. Karmeshu, Former Dean of SC&IS, Jawaharlal Nehru University, India
- \* Prof. Shantaram Vasikarla, California State University Long Beach, USA
- Dr. Al Salour, Technical Fellow, The Boeing Company, USA

#### Publication

Paper submission is now open. To submit the paper, please check workshop webpage. All accepted and presented papers will be indexed in IEEE Xplore Digital Library.

#### Important Dates

Full paper submission deadline - September 30<sup>th</sup>, 2015

Notification for acceptance - October 30<sup>th</sup>, 2015

### Registration

Each paper must have at least one author registered with full registration fee. A single, full registration can cover up to two papers.



Intelligent Signal Processing

Intelligent Systems and Control

Learning and Adaptive Control

Intelligent Monitoring Systems

Technologies in Industrial Automation

Machine Learning Algorithms

Human Machine Interaction

Industrial Automation

Swarm Intelligence

Intelligent Agents

Experts Systems

Healthcare Systems

Cyber Physical System

Natural Language Processing

Modeling and Simulation

Internet of Things

Smart Grid

Cognition

Smart Vehicles

#### **Topics of Interest**