National Education Society (R.)

Jawaharlal Nehru National College of Engineering, Shivamogga

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DSP and Image Processing through Machine Learning

Under the patron-ship of National Education Society®, Shimoga department of Electronics & Communication Engineering and Internal Quality Assurance Cell (IQAC) of Jawaharlal Nehru National College of Engineering, Shimoga in association with Institution of Electronics and Telecommunication Engineers, New Delhi and Indian Society for Technical Education, New Delhi organizing one week National level workshop on **"DSP and Image Processing through Machine Learning" from 8th January to 12th January 2019.**

The inaugural function of the programme will be held on 8th January 2018 at 9.30AM in the AD Block Auditorium. Dr. Ashok Rao, Former Head, Network Project, CEDIT, IISc, Bangalore is the chief guest of the function. Guests of honor will be Sri. S. N. Nagaraja, Secretary NES. Honorable presence will be Dr. L. K. Sreepathi, Vice-Principal, JNNCE, Shimoga and the function will be presided over by Dr. H. R. Mahadevaswamy, Principal, JNNCE, Shimoga. Convener of the workshop Dr. P. Manjunatha, Professor & Head, E&C department will also be present.

This Workshop is organized for Five days to provide a platform for faculties, researchers and technologists, to understand the concepts of Pattern Processing, Machine Learning, Mathematics of Machine Learning, Convolutional Neural Network and Deep Learning Techniques and it's applications to solve complex engineering problems. With this in view the course would devote time for talks on the topics cited below along with 'Handson Sessions'.

Following Topics will be covered in the Workshop:

- Introduction to fundamentals of Machine Learning, Pattern Recognition.
- Machine Learning techniques for images and speech.
- Mathematics in Machine Learning.
- Linear Algebra, Probability and Random Processes
- Machine Learning for speech Signal Processing using Keros
- Machine Learning techniques on images using Regression. Classification and CNN/Deep Learning.
- Laboratory sessions using Python, Keros, MATLab

Resource persons from distinguished Research Institutes, industries and colleges will deliver expert lectures and practical sessions.

This Workshop is very useful for academicians from Electronics, Telecommunication, Computer science, Information science, industry personnel, researchers and allied disciplines.