#### **SHORT TERM COURSE**

on

Application of AI Techniques in various engineering fields

(AIVEF-2016)

9<sup>th</sup> December – 11<sup>th</sup> December, 2016



**ORGANISED BY** 

DEPARTMENT OF

MECHANICAL ENGINEERING

NATIONAL INSTITUTE OF

**TECHNOLOGY** 

**ROURKELA - 769008, INDIA** 

### **CONTACT ADDRESS**

Dr. Dayal R. Parhi

Course Coordinator, AIVEF-2016,

Department of Mechanical Engineering,

National Institute of Technology, Rourkela -

**769008 (ODISHA), INDIA** 

Phone : 0661-2462514 (O)

: 0661-2463514 (R)

Cell: 09861067309

Fax: 0661-2472926, 2462022

E-mail: seminardayal@gmail.com:

drkparhi@nitrkl.ac.in Please visit our website

listed below:

http://www.nitrkl.ac.in/Academic/6Short
TermCourse/Default.aspx

#### **♦** Bank Transaction Details:

The D.D. from any nationalized bank should be drawn in favour of "Continuing Education NIT Rourkela" payable at SBI, NIT Campus Branch, Rourkela, India. (Code-2109)

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#### INTRODUCTION

In this course, recent developments in AI Techniques will be focused. The AI techniques such as Mamdani Fuzzy, Sugeno Fuzzy, Simple Neural Network, Back Propagation Neural Network, Re-current Neural Network, Kohonen Neural Network, Swarm Intelligence Technique, Bacteria Foraging Technique, Teach and Learn Technique, Ant colony technique, Bees Algorithm, Simulated Algorithm, Potential Field Method, GA Algorithm, Artificial Immune System, Cuckoo Search and current AI techniques will be analysed and discussed in the course in relation to various Engineering application and fields.

#### **THEMES**

The seminar AIVEF-2016 will focus on current research trends in Robotics and Mechatronics with innovations in design and its applications in institutes and manufacturing industries including the following themes with 30 hours of lectures and class assignments.

• Sugeno Fuzzy

Network

Technique

• GA Algorithm

Cuckoo Search

• Back Propagation

Neural Network

• Bacteria Foraging

• Simulated Algorithm

- Mamdani Fuzzy
- Simple Neural Network
- Re-current Neural Network Kohonen Neural
- Swarm Intelligence Technique
- Teach and Learn Technique Ant colony technique
- Bees Algorithm
- Potential Field Method
- Artificial Immune System
- AI techniques

VENUE

Rourkela is a major hub of industrial activities in Eastern India, with cluster of Steel Industries . The city also hosts the Software Technology Park of India (STPI). Rourkela en routes Calcutta (Howrah) - Mumbai main line of South Eastern railway. The Rourkela railway station and intrastate bus stop are 6 kms and 2 kms from NIT Rourkela respectively. The climate at Rourkela during December will be pleasant with temperature ranging from 22°C to 35°C.

#### ACCOMMODATION

A limited number of rooms with shared accommodations are available in Halls, North and South Guest House of the institute. The confirmed accommodation for the delegates can be arranged by the organizing committee members either in the institute guest house and / or in halls on request accompanied with advance charge in the form of D.D as per the GH Charge.

#### REGISTRATION FEE STRUCTURE

- > Industry delegates Rs.1000/-(without accommodation and food)
- Delegates from R&D and Academic Institutions Rs. 800/- (without accommodation and food)
- Bona fide Student/Research Scholar delegates Rs.500/- (without accommodation and food) and Rs. 300/- for NIT Rourkela Students
- Delegates from outside India €200 or US \$ 300 Last date of Registration 30th November 2016.

Mailing Address Dr. Dayal R. Parhi Course Coordinator, AIVEF-2016, **Department of Mechanical Engineering, National Institute of** Technology,

#### **PROFORMA**

### SHORT TERM COURSE

## **Application of AI Techniques in various** engineering fields

(AIVEF-2016)

9th December – 11th December, 2016 Last date of registration 6<sup>th</sup> November 2016

#### **Registration Form for Delegates**

Name:		
Address:		
Mobile/Phone:		
E-mail:		
Gender :		
Accommodation Required: Yes No (If yes, Institute Guest House or Hotel):  Details of total amount of registration fee.  (Accommodation charges and food to be borne by rest participate)		
D.D. No:		
Amount Date		
Date: Signature		

## PROFORMA SHORT TERM COURSE

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