

# WORKSHOP ON ARTIFICIAL INTELLIGENCE

## **Introduction:**

AI (artificial intelligence) is the simulation of human intelligence processes by machines, especially computer systems. These processes include learning (the acquisition of information and rules for using the information), reasoning (using the rules to reach approximate or definite conclusions) and self-correction. Applications of AI include expert systems, speech recognition and machine vision.

## **Details of the workshop:**

The workshop is conducted by Team Spark'18, an annual in-department fest conducted by Department of EEE.

The workshop focusses on implementing few of the many applications as mentioned above using MATLAB. The national workshop is spanned two days long aimed for undergraduate students. Topics like 'Artificial Neural Networks', 'Fuzzy Logic' is given emphasis.

Students explore the endless possibilities of AI, and the implementation of the concept in MATLAB. Hands-on practise sessions gave scope to build knowledge on the areas the instructor advices.

Current Scenario in the Artificial Intelligence sector is explored, and gave insights to the students for their career in this field.

## **Workshop Presenters:**

1. **Dr. S. V. N. L. Lalitha** (Student Branch Counsellor & Vice-Chair, IEEE Guntur Sub-Section), Professor, Dept. of EEE
2. **Dr. G. Kesava Rao** Professor, Dept. of EEE
3. **Mr. K. P. Prasad Rao** (LMISTE, IACSIT, IAENG), Asst. Professor, Dept. of EEE
4. **Mr. M. Naga Chaitanya** (MIEEE), Asst. Professor, Dept. of EEE
5. **Mr. G. R. S. Naga Kumar** (IAENG), Asst. Professor, Dept. of EEE

## **Schedule and Structure of the workshop:**

### **Day 1**

<b>Timings</b>	<b>Topic</b>	<b>Faculty Name</b>
<b>11.00 AM-12:30 PM</b>	<b>Introduction to “Artificial Intelligence”</b>	<b>Dr. S. V. N. L. Lalitha</b> (Student Branch Counsellor, IEEE Guntur Sub-Section), Professor, Dept. of EEE
<b>12:30PM-1:00PM</b>	<b>“Artificial Neural Networks” Introduction</b>	<b>Mr. K. P. Prasad Rao</b> (LMISTE, IACSIT, IAENG), Asst. Professor, Dept. of EEE
<b>1:00 PM-2:00 PM</b>	<b>LUNCH BREAK</b>	
<b>2:00 PM-3:30 PM</b>	<b>Hands-on Experience with “Artificial Neural Networks”</b>	<b>Mr. G. R. S. Naga Kumar</b> (IAENG), Asst. Professor, Dept. of EEE  <b>Mr. K. P. Prasad Rao,</b> (LMISTE, IACSIT, IAENG), Asst. Professor, Dept. of EEE  <b>Mr. M. Naga Chaitanya</b> (MIEEE), Asst. Professor, Dept. of EEE
<b>3:30 PM-3:45 PM</b>	<b>TEA BREAK</b>	
<b>3:45 PM-5:00 PM</b>		<b>Mr. G. R. S. Naga Kumar</b> (IAENG), Asst. Professor, Dept. of EEE

**Hands-on Experience with  
“Artificial Neural Networks”**

**Mr. K. P. Prasad Rao**  
(LMISTE, IACSIT, IAENG),  
Asst. Professor, Dept. of EEE

**Mr. M. Naga Chaitanya**  
(MIEEE), Asst. Professor, Dept.  
of EEE

**Day 2**

<b>Timings</b>	<b>Topic</b>	<b>Faculty Name</b>
<b>9:00 AM-10:15 AM</b>	<b>“Artificial Intelligence” and applications</b>	<b>Dr. G. Kesava Rao</b> (Fellow,IEEE, Professor, Dept. of EEE
<b>10:15 AM-11:15 AM</b>	<b>“Fuzzy Logic” Introduction</b>	<b>Mr. G. R. S. Naga Kumar</b> (IAENG), Asst. Professor, Dept. of EEE <b>Mr. K. P. Prasad Rao</b> (LMISTE, IACSIT, IAENG), Asst. Professor, Dept. of EEE <b>Mr. M. Naga Chaitanya,</b> Asst. Professor, Dept. of EEE
<b>11:15 AM-11:30 AM</b>	<b>TEA BREAK</b>	
<b>11:30 AM-12:40 PM</b>	<b>Analysis and design using “Fuzzy Logic” toolbox</b>	<b>Mr. M. Naga Chaitanya,</b> Asst. Professor, Dept. of EEE
<b>12:40 PM-1:30 PM</b>	<b>LUNCH BREAK</b>	

**1:30 PM-3:30 PM**

**Discussion on some applications  
with “Artificial Neural  
Networks” and “Fuzzy”**

**Mr. G. R. S. Naga Kumar**  
(IAENG), Asst. Professor,  
Dept. of EEE

**Mr. K. P. Prasad Rao**  
(LMISTE, IACSIT, IAENG),  
Asst. Professor, Dept. of EEE

**Mr. M. Naga Chaitanya**  
(MIEEE), Asst. Professor,  
Dept. of EEE

**Workshop Proceedings:**



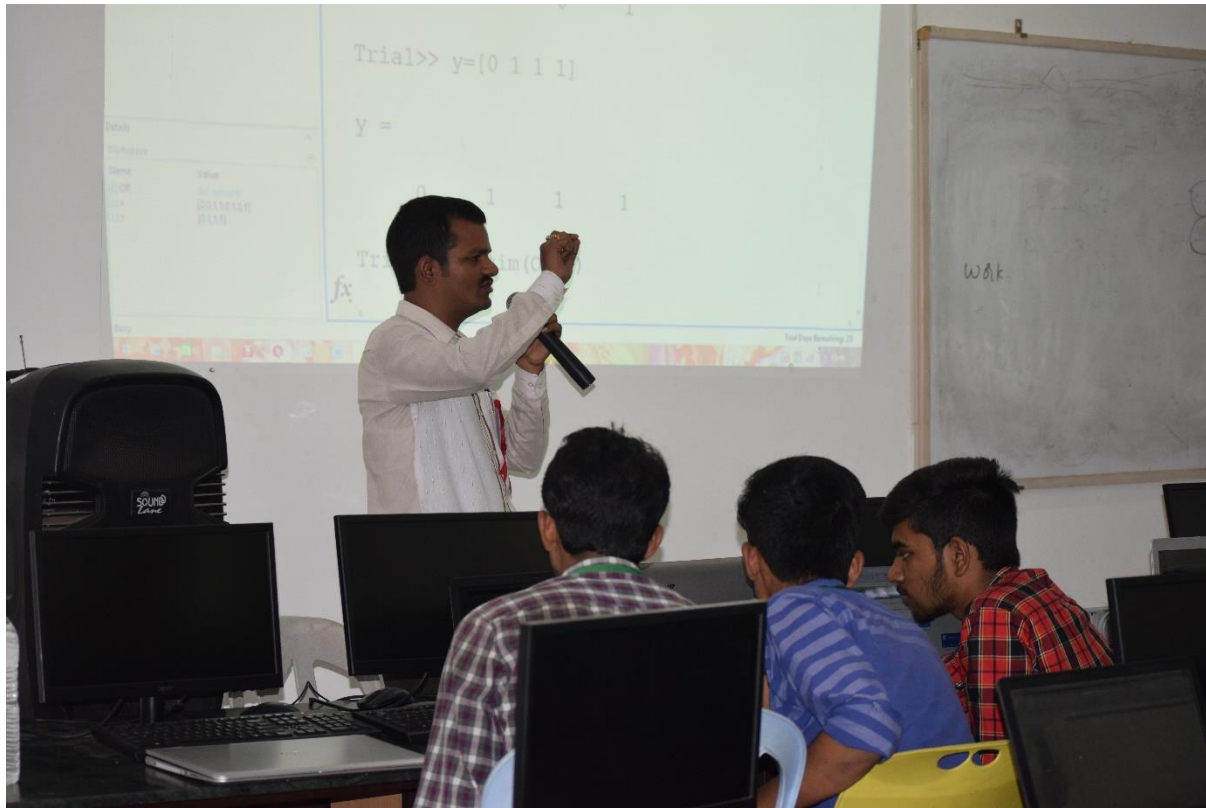
1) Dr. S. V. N. L. Lalitha giving insights on AI and applications



2) Dr. Lalitha speaking about Humanoid 'Sofia'



3) Dr. K. P. Prasada Rao explaining about evolution of computing



4) Mr. G. R. S. Naga Kumar illustrating MATLAB code for AI



5) Dr. G. Kesava Rao lecturing about AI





6) Mr. M. Naga Chaitanya illustrating Fuzzy Logic Toolbox in MATLAB



7) Students learning the basics of Fuzzy Logic