REPORT ON

INTRODUCTION TO FUZZY LOGIC TOOL BOX

(SUBJECT BASED WORKSHOP)

KL UNIVERSITY



BY

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SPEAKERS:

1.Dr.O.Chandrashekar

(Prof.EEE Department)

2.Mrs.S.V.N.L Lalitha

(Associate Prof EEE Department)

CONTENTS:

- 1. Introduction to fuzzy logic.
- 2. Fuzzification and De-fuzzification
- 3. Membership functions
- 4. Fuzzy Interface System (FIS) Editor.
- 5. Types of Fuzzy Controller.
- 6. Input and Output variables.
- 7. Types of Membership Functions.
- 8. Parameter initialization.
- 9. Refer Base creation.
- 10. Hands on Experience. (Ex: Speed Control of DC Servo Motor using PID & FUZZY Logic control)

EEE Department has conducted a Workshop on FUZZY LOGIC TOOL BOX on 26-9-2014. The speakers were MS.S.V.N.L Lalitha(Associate Professor, EEE Department) and Dr.O.Chandrashekar (Professor, EEE Department). It was attended by all third year EEE Students and faculty of EEE department .Ms.S.V.N.L.Latith has started the workshop by introducing the basics of FUZZY LOGIC. She has also discussed FUZZIFICATION and DEFUZZIFICATION and Membership functions. She has taken up the example of weather conditions based on temperature control.



The workshop continued by the next speaker Dr. O. Chandra shekar (Prof.EEE Department). He has focused on Fuzzy interface system editor, Implementation of Fuzzy logic controller using MATLAB SOFTWARE and types.



- Types of Fuzzy controller.
- Input and output variables.
- Types of membership function.
- Parameter initialization.
- Reference base creation.

He has applied fuzzy logic to the practical system such as simple pendulum ,water level control and indication. Last it was concluded with dc servomotor speed control example. Through this workshop students have learnt the basic rules of fuzzy and applications in control system.



The session by ended with vote of thanks to the speakers, HOD EEE, Principal, K L U college of engineering and to the management by Mr. Aravind, Final year EEE student.