ENG5009 Advanced Control 5

Laboratory 1 Worksheet Answer Grid

Fuzzy Logic

1. *Introduction to Fuzzy Logic Toolbox*

Defuzzification Method	Service	Food	Tipping Value
Centroid	5	5	15
Centroid	7	8	20.341
Centroid	10	2	16.421
Mean of Maximum	5	5	15
Mean of Maximum	7	8	24.9
Mean of Maximum	10	2	24.9
Bisector	5	5	15
Bisector	7	8	21.6
Bisector	10	2	22.5

2. *Integrating the Fuzzy system into the command line*

Defuzzification method used: Centroid

Service	Food	Value
5	5	15
7	8	20.341
10	2	16.421

3. *Further Fuzzy Logic Example*

Input Temperature, °C	Output
9	15.035
13.1	11.222
26.5	-9.5957
20	-9.4369e-17