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APPENDIXES

APPENDIX A

Programming with MATLAB:

[System]

Name='fuzzycon'

Type='mamdani'

Version=2.0

NumInputs=2

NumOutputs=1

NumRules=25

AndMethod='min'

OrMethod='max'

ImpMethod='min'

AggMethod='max'

DefuzzMethod='centroid'

[Input1]

Name='e'

Range=[0 1]

NumMFs=5

MF1='NB':trimf,[-0.25 0 0.25]

MF2='NS':trimf,[0 0.25 0.5]

MF3='ZE':trimf,[0.25 0.5 0.75]

MF4='PS':trimf,[0.5 0.75 1]

MF5='PB':trimf,[0.75 1 1.25]

[Input2]

Name='ce'

Range=[0 1]

NumMFs=5

MF1='NB':trimf,[-0.25 0 0.25]

MF2='NS':trimf,[0 0.25 0.5]

MF3='ZE':trimf,[0.25 0.5 0.75]

MF4='PS':trimf,[0.5 0.75 1]

MF5='PB':trimf,[0.75 1 1.25]

[Output1]

Name='T'

Range=[0 1]

NumMFs=5

MF1='NB':trimf,[-0.25 0 0.25]

MF2='NS':trimf,[0 0.25 0.5]

MF3='ZE': 'trimf',[0.25 0.5 0.75]

MF4='PS': 'trimf',[0.5 0.75 1]

MF5='PB': 'trimf',[0.75 1 1.25]

[Rules]

1 1, 1 (1) : 1

1 2, 1 (1) : 1

1 3, 2 (1) : 1

1 4, 2 (1) : 1

1 5, 3 (1) : 1

2 1, 1 (1) : 1

2 2, 2 (1) : 1

2 3, 2 (1) : 1

2 4, 3 (1) : 1

2 5, 4 (1) : 1

3 1, 2 (1) : 1

3 2, 2 (1) : 1

3 3, 3 (1) : 1

3 4, 4 (1) : 1

3 5, 4 (1) : 1

4 1, 2 (1) : 1