

Mini Project 1

Deadline: Wed., Feb. 20, 11:59 PM

Instructor: Dr. Shahryar Rahnamayan, PEng

Design and Implementation of

Fuzzy Expert Match-Making System

Problem: Designing a Fuzzy Expert System for marriage decision making. You need to follow all these steps:

- 1) Step 1: Specify the problem and define linguistic variables*
- 2) Step 2: Determine fuzzy sets*
- 3) Step 3: Elicit and construct fuzzy rules*
- 4) Step 4: Encode the fuzzy sets, fuzzy rules and procedures to perform fuzzy inference into the expert system, for this step you can use any fuzzy library, but the MATLAB's Fuzzy Logic Toolbox is recommended to be utilized.*
- 5) Step 5: Evaluate and tune the system*
- 6) Step 6: Show some 4-5 examples as test cases*

The following factors can be utilized in your design:

Personal characteristics, Education and the Major, Age, Sexual orientation, Financial standing, Career, Habits, Hobbies, Originality, Family, Future plans, Beauty, Religion, Political standing, etc.

Each group needs to submit a project report, which covers all details of Steps 1-6 and the implemented code.