

Project – Part B

Introduction to Artificial Intelligence

Winter 2013

Value of Part A: 8% (out of 20%)

Due date: Thu., April 11, 11:59 PM

Team members: No more than three students in each group

Language: Matlab (using Fuzzy Logic Toolbox)

Project Part B - Objectives

- 1) Understanding the real-world application of fuzzy systems
 - 2) Designing a decision-making system
 - 3) Visualization, tuning, and modification of a fuzzy system
-

Project Description

Designing a **Fuzzy Expert Marriage Decision-Maker system**. The following five main factors should be considered in the process of decision. You need to use the **Mamdani**-type fuzzy inference.

- 1) Personal characteristics
- 2) Education
- 3) Financial standing
- 4) Beauty
- 5) Previous Friendship level and history

What do you need to submit as a zipped folder?

1) Matlab file (.m) with all generated figures.

2) Your report as a PDF file, including specifying the problem and define linguistic variables, determining fuzzy sets, eliciting and construct fuzzy rules, encoding the fuzzy sets, designing fuzzy rules and procedures to perform fuzzy inference into the expert system, evaluating and tune the system, some test cases, and conclusion.