Soft Computing Homework 7: Nearest Neighbor, Case-Based Reasoning, Projects (16 points)
Due: Tuesday Oct 21

Problem 1:

Read Chapters 1 –3 of the Watson Book. Answer the following questions: (8 points)

1) Compare and contrast rule based systems with case-based systems. What are the advantages and disadvantages of each?

2) Describe the case based reasoning cycle.

3) Compare and contrast the nearest neighbor and inductive retrieval techniques. What are the differences of the algorithms? What are possible shortcomings of each technique? What are the perceived strengths of each technique? Why are those techniques particularly suitable for CBR?

4) Expand table 3-3 by writing one more reason for “when to use” and “when not to use” each technology type. Just hand in a table with the additional reasons.

Problem 2:

Describe your project by answering the following questions. (8 points)

What is the goal of your project?
Write a paragraph describing your idea.

What is the scope of your project?
Include specific issues that you will and will not address in your project.

What is the input to your project?
Include a few examples

What is the output of your project?
Include an example of the output for each input above

What are the data sources you are using?
Include a few examples and a description so we can understand the data

How does your project work?
What elements of soft computing are you going to use.
Create a top-level diagram describing your project (like on Jang figure 22.6)

How are you going to test your project?
List standard and abnormal cases considered where applicable.

Are there any other items that are relevant to your project?
Describe them.