Neuro-Fuzzy and Soft Computing chapter 1 J.-S.R. Jang

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What is covered in this class?

We will teach techniques useful in creating intelligent software systems that can deal with the uncertainty and imprecision of real world problems

Some components of Intelligent systems are

- human-like they possess human-like expertise within a specific domain,
- adaptable they adapt themselves and learn to do better in a changing environment, and
- explanations they explain how they make decisions or take actions

How will we teach the techniques?

We will present

- multiple techniques from Soft Computing +,
- when each technique is applicable
- examples of industrial applications

"If the only tool you have is a hammer, then every problem looks like a nail"

- anonymous

Soft Computing

"Soft computing is an emerging approach to computing which parallels the remarkable ability of the human mind to reason and learn in an environment of uncertainty and imprecision" - Lotfi Zadeh



What is Soft Computing? Soft Computing is a field that currently includes Fuzzy Logic Neural Networks Probabilistic Reasoning(Genetic Algorithms, BBN), and Other related methodologies • Case-Based Reasoning Soft Computing combines knowledge, techniques, and methodologies from the sources above to create intelligent systems





















Types of Pro	bgramming	>
	Advantages	Disadvantage
Functional Programming	Precise Deterministic	Reasoning Learning
Symbolic Programming (Al)	Reasoning Learning	Uncertainty Confidence
Soft Computing	Uncertainty Confidence	Precise Deterministic











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	The end
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