Soft Computing : Least-Squares Estimators

Least-Squares Methods for System Identification (Chapter 5)

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Soft Computing : Least-Squares Estimators System Identification The problem of determining a model for an unknown system by observing its input-output data pairs is generally referred to as system identification

- The purposes of system identification are • to predict a systems behavior,
 - to explain the interactions and relationships between inputs and outputs, and
 - to design a controller or simulation of the system

Soft Computing : Least-Squares Estimators Why cover System Identification

It is a well established and easy to use technique for modeling a real life system.

It will be needed for the section on fuzzy-neural networks.

There will be a homework assignment that covers it.



/	Soft Computing : Least-Squares Estimators		
	Spring Data		
	Experiment	Force(newtons)	Length(inches)
			1.5
		1.9	2.1
		3.2	2.5
		4.4	3.3
		5.9	4.1
	6	7.4	4.6
	7	9.2	5.0
5	What will the length be when the force is 5.0 newtons?		































