

Nomenclature

GRNN

Input Vector	X
Training sample i	(X_i/Y_i)
Distance from training sample i	D_i
Smoothness parameter	s
Dimension of input vector	q
Number of training samples	n
Predicted Value	Y

Backpropagation Neural Network

point of prediction	x
weight	V, W
prediction	o
intermediate stages of prediction	y
learning signal	d
Cycle Error	E

training parameter	h
training sample	d

Bayes Strategy for Pattern Recognition

decision	d
state of nature	Θ
probability density function	f
lossfunction	I
prior probability	h
input vector	X
weighting function	W

Heat Exchanger

Resistance	R	K/W
Heat transfer coefficient	h	W/(m ² K)
Area	A	m ²
Nusselt Number	Nu	--
thermal conductivity	k	W/(m K)

Diameter	D	m
Reynoldes Number	Re	--
Prandtl Number	Pr	--
Radius	r	m
Lentgh	L	m
UA	UA	W/K
Number of Transfer Units	NTU	--
mass flow rate	m_{water}	kg/s
specific heat constant	c_p	J/(kg K)
effectiveness	eff	--
velocity	vel	m/s
Temperature	T	K

Indices of Heat Exchanger

inside of tube	i
outside of tube	o
state after heat excahnger	out
state before heat exchanger	in
medium air	air
medium water	$water$