GP - MATLAB File Help

<u>View code for GP</u>

## **GP**

Description: This class uses preference, coac, and ordinal feedback to maintain a Bayesian posterior via a Gaussian process.

Date: June 25, 2021

Authors: Maegan Tucker, Kejun (Amy) Li

#### **Class Details**

SuperclasseshandleSealedfalseConstruct on loadfalse

#### **Constructor Summary**

GP Construct an instance of this class

### **Property Summary**

• •	
GP noise var	hyperparameter for noise variance of the GP
action names	
<u>actions</u>	over which to evaluate posterior
coac data	
coac labels	
coac noise	
g <u>rid size</u>	grid size corresponding to continuous action space
initial guess	
<u>isNormalize</u>	option to normalize posterior to 0 to 1
<u>lengthscales</u>	hyperparameter for lengthscale of each action space dimension
<u>linkfunction</u>	
<u>mean</u>	
ord data	
ord labels	
ord noise	
ordinal thresholds	
pref data	
pref labels	
<u>pref_noise</u>	posterior noise hyperparameter for:
prior cov	
prior cov inv	
<u>sigma</u>	
signal variance	hyperparameter for mean variance of the GP
<u>uncertainty</u>	

## **Method Summary**

<u>addlistener</u>	Add listener for event.
<u>delete</u>	Delete a handle object.
<u>eq</u>	== (EQ) Test handle equality.

	<u>findobj</u>	Find objects matching specified conditions.
	<u>findprop</u>	Find property of MATLAB handle object.
	<u>ge</u>	>= (GE) Greater than or equal relation for handles.
	<u>gt</u>	> (GT) Greater than relation for handles.
Sealed	<u>isvalid</u>	Test handle validity.
	<u>le</u>	&It= (LE) Less than or equal relation for handles.
	<u>listener</u>	Add listener for event without binding the listener to the source object.
	<u>lt</u>	&It (LT) Less than relation for handles.
	<u>ne</u>	~= (NE) Not equal relation for handles.
	<u>notify</u>	Notify listeners of event.
	plotGP	Description: Plots the posterior mean
Static	<u>sigmoid</u>	Evaluates the sigmoid function at x
Static	sigmoid der	Evaluates the derivative of the sigmoid function at x
Static	sigmoid der2	Evaluates the 2nd derivative of the sigmoid function at x

# **Event Summary**

ObjectBeingDestroyed Notifies listeners that a particular object has been destroyed.