



Auto-Tagging System

Auto-Tagging System



Understand the Business Problem

 StackExchange

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Questions


Tags


Users


Unanswered


hyperparameters optimisation with linear kernel

Asked today Active today Viewed 12 times


1







I want to conduct an SVM model-regression (i.e., support vector regression), using a **linear kernel function**. Does it make sense to perform a cross-validation hyperparameter optimization when the kernel function is linear? If so, what should be the range of values for each hyperparameter in the search?

Thank you

machine-learning


cross-validation

svm

kernel-trick

rbf-kernel

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Title

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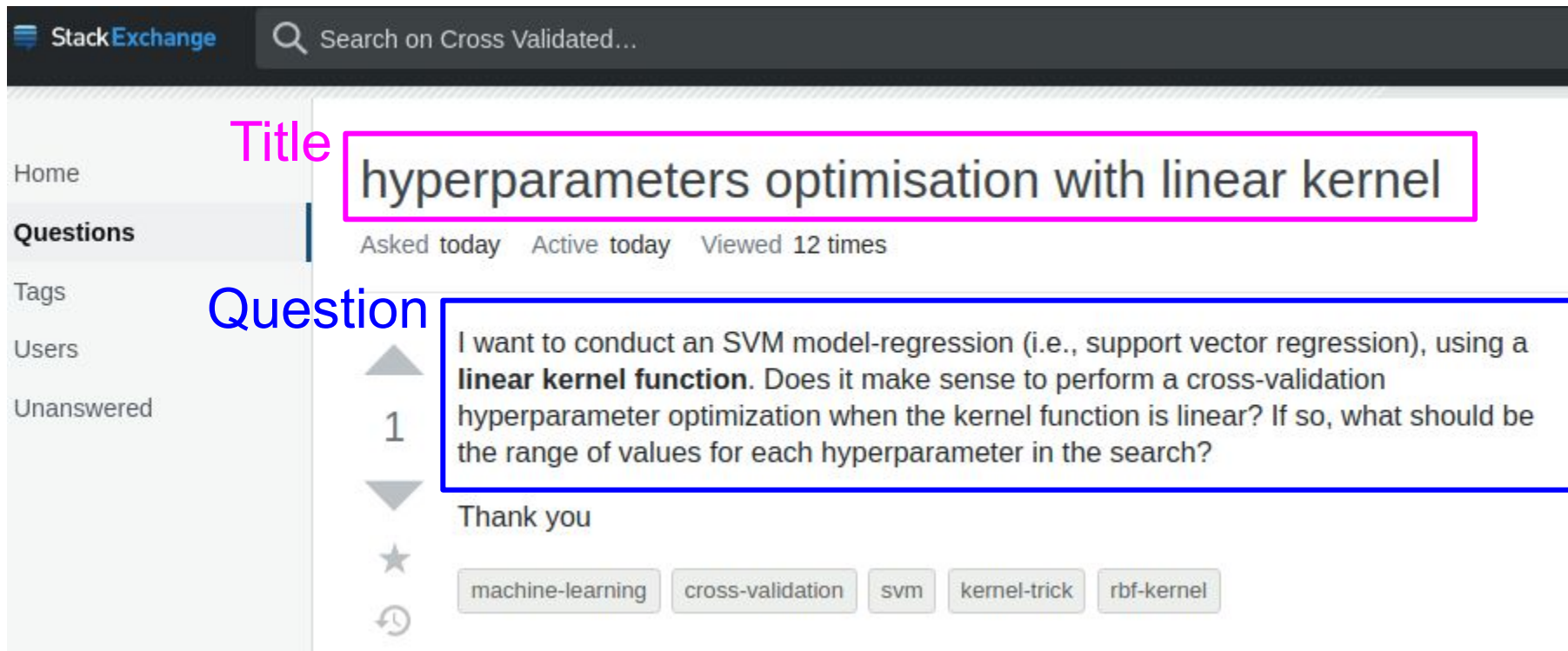
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Thank you

machine-learning cross-validation svm kernel-trick rbf-kernel

Understand the Business Problem



The image is a screenshot of a StackExchange question page. The header bar is dark grey with the StackExchange logo on the left and a search bar on the right. The left sidebar contains navigation links: Home, Questions (highlighted), Tags, Users, and Unanswered. The main content area shows a question titled "hyperparameters optimisation with linear kernel". The title is enclosed in a pink rectangular box, and the word "Title" is written in pink text to its left. Below the title, the text "Asked today Active today Viewed 12 times" is displayed. The question body is enclosed in a blue rectangular box, and the word "Question" is written in blue text to its left. The question text is: "I want to conduct an SVM model-regression (i.e., support vector regression), using a **linear kernel function**. Does it make sense to perform a cross-validation hyperparameter optimization when the kernel function is linear? If so, what should be the range of values for each hyperparameter in the search?". Below the question text, there is a "Thank you" message, a star icon, and a clock icon. At the bottom of the question area, there are five tags: "machine-learning", "cross-validation", "svm", "kernel-trick", and "rbf-kernel".

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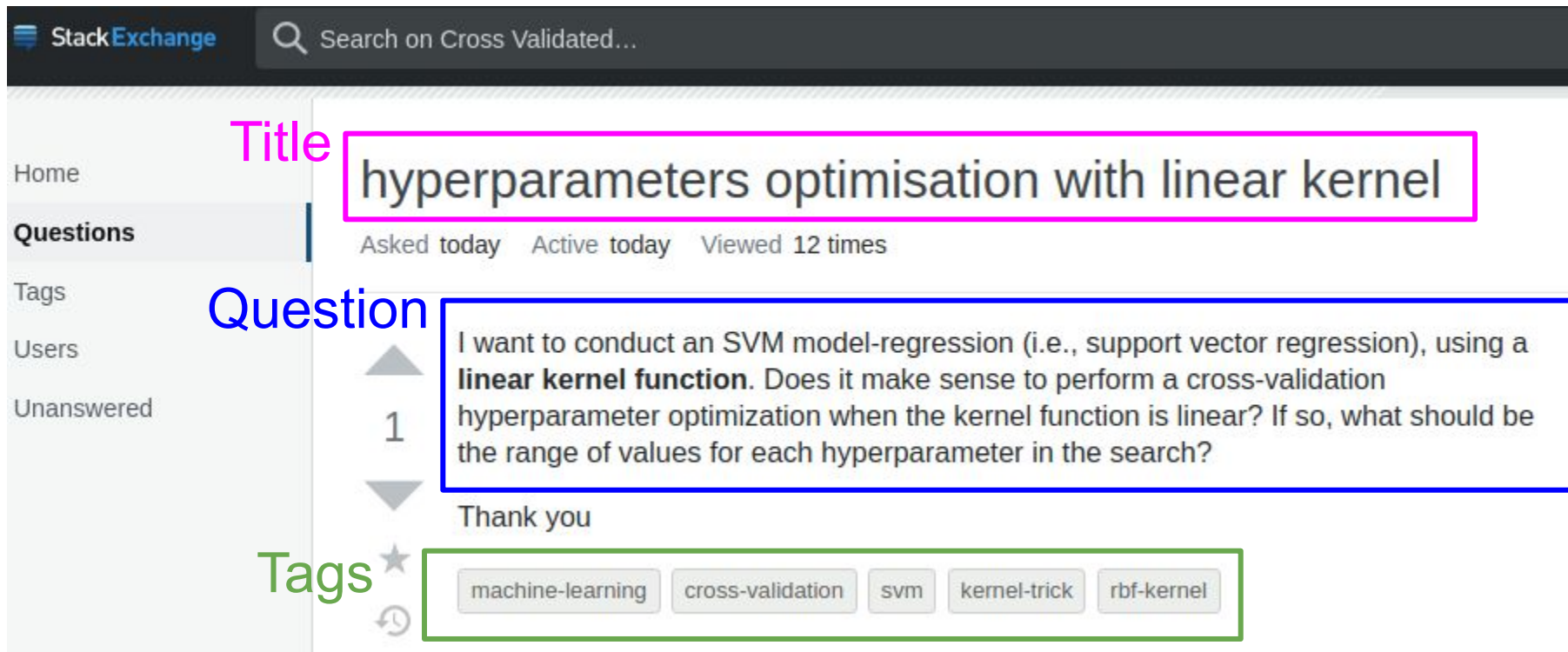
Question

I want to conduct an SVM model-regression (i.e., support vector regression), using a **linear kernel function**. Does it make sense to perform a cross-validation hyperparameter optimization when the kernel function is linear? If so, what should be the range of values for each hyperparameter in the search?

Thank you

machine-learning cross-validation svm kernel-trick rbf-kernel

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StackExchange Search on Cross Validated...

Home Questions Tags Users Unanswered

Title hyperparameters optimisation with linear kernel

Asked today Active today Viewed 12 times

Question

I want to conduct an SVM model-regression (i.e., support vector regression), using a **linear kernel function**. Does it make sense to perform a cross-validation hyperparameter optimization when the kernel function is linear? If so, what should be the range of values for each hyperparameter in the search?

1

Thank you

Tags machine-learning cross-validation svm kernel-trick rbf-kernel

Understand the Business Problem

Business Problem: Untagged questions or questions with irrelevant tags lead to a large number of unanswered questions. The experts find it difficult to discover the right questions, and the users who post questions don't get timely responses. This situation leads to a drop in the level of user-engagement on the platform

Data Science Problem

Data Science Problem

- Input: Text from the question

Data Science Problem

- Input: Text from the question
- Target Variable: Multiple Tags

Data Science Problem

- Input: Text from the question
- Target Variable: Multiple Tags
- Different from Binary and Multiclass Classification

“The rising environmental pollution screams out for a need to reduce fossil fuel consumption till a replacement for mobility doesn’t spread out in the world”

“The rising **environmental pollution** screams out for a need to reduce **fossil fuel** consumption till a replacement for mobility doesn't spread out in the world”

Data Science Problem

- Input: Text from the question
- Target Variable: Multiple Tags
- Different from Binary and Multiclass Classification

X	y
X_1	t_1
X_2	t_2
X_3	t_3

Multiclass

Data Science Problem

- Input: Text from the question
- Target Variable: Multiple Tags
- Different from Binary and Multiclass Classification

X	y
X_1	t_1
X_2	t_2
X_3	t_3

Multiclass

X	y
X_1	$[t_2, t_5]$
X_2	$[t_1, t_3, t_2]$
X_3	$[t_4]$

Multilabel

Data Science Problem

- Input: Text from the question
- Target Variable: Multiple Tags
- Different from Binary and Multiclass Classification

X	y
X_1	t_1
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Multiclass

X	y
X_1	$[t_2, t_5]$
X_2	$[t_1, t_3, t_2]$
X_3	$[t_4]$

Multilabel

t_1 : 'python'

t_2 : 'regression'

t_3 : 'numpy'

Thank You