

Machine Learning with Python-From Linear Models to Deep Learning

Discussion Course **Progress** Dates Resources

* Course / Unit 2. Nonlinear Classification, Linear regression, ... / Lecture 6. No

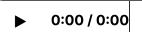


6. Kernel Composition Rules

 \square Bookmark this page

Exercises due Mar 8, 2023 08:59 -03 Completed

Kernel Composition Rules



Video

▲ Download video file

Transcripts

- ▲ Download SubRip (.srt) file
- **▲** Download Text (.txt) file

Kernel Composition Rules 1

1/1 point (graded)

Recall from the video above that if $f:\mathbb{R}^d o\mathbb{R}$ and K(x,x') is a kernel, so is

$$\widetilde{K}\left(x,x^{\prime}
ight)=f\left(x
ight)K\left(x,x^{\prime}
ight)f\left(x^{\prime}
ight).$$

If there exists $\phi\left(x
ight)$ such that

$$K\left(x,x^{\prime}
ight) =\phi\left(x
ight) \cdot\phi\left(x^{\prime}
ight) ,$$

then which of the following $oldsymbol{arphi}$ gives

Submit

You have used 2 of 2 attempts

Kernel Composition Rules 2

1/1 point (graded)

Let and be two vectors of the same dimension. Use the the definition of kernels at composition rules from the video above to decide which of the following are kernels. (No feature vectors that are not polynomial.)

(Choose all those apply.)





Previous

Next >





edX

<u>About</u>

<u>Affiliates</u>

edX for Business

Open edX

Careers

News

Legal

Terms of Service & Honor Code

Privacy Policy

Accessibility Policy

Trademark Policy

<u>Sitemap</u>

Cookie Policy

Do Not Sell My Personal Information

Connect











© 2023 edX LLC. All rights reserved.

深圳市恒宇博科技有限公司 <u>粤ICP备17044299号-2</u>