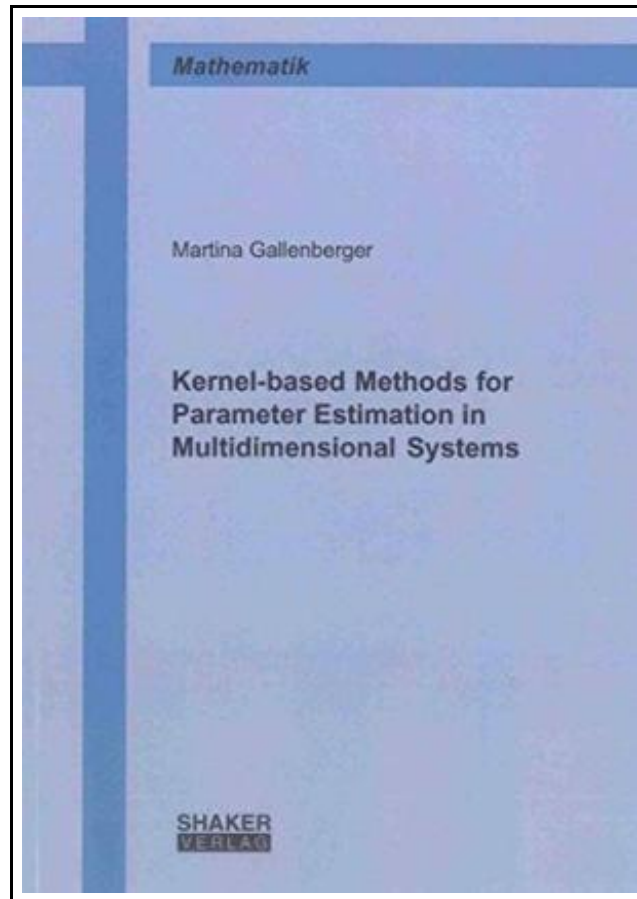


Kernel-based Methods for Parameter Estimation in Multidimensional Systems



Filesize: 4.38 MB

Reviews


An extremely great ebook with lucid and perfect explanations. It is full of knowledge and wisdom Its been printed in an exceedingly straightforward way in fact it is merely right after i finished reading through this publication by which really transformed me, alter the way i believe.

(Spencer Fritsch)

KERNEL-BASED METHODS FOR PARAMETER ESTIMATION IN MULTIDIMENSIONAL SYSTEMS



Shaker Verlag Sep 2013, 2013. Buch. Book Condition: Neu. Neuware - In this thesis, we show how kernel regularization approaches can be used for parameter estimation in different multidimensional systems. We study this problem in the context of reproducing kernel Hilbert spaces of vector-valued functions. This also allows interpretation in terms of Gaussian processes and RBF approximation networks. The results of the thesis are the extension of estimation methods to the case of vector-valued data which includes the development of new approximation approaches or optimization criteria. Furthermore, we present a new model for the glucose-insulin regulatory system illustrating recent biological results. This model is used as a concrete example for the use of a RBF approximation network to estimate the solution of a system of differential equations. In the first chapter we summarize two basic concepts for estimating vector-valued functions based on a finite set of measurements. As this problem is ill-posed, we consider regularization approaches for function estimation. First, we present the main results of the theory of operator-valued reproducing kernels and corresponding reproducing kernel Hilbert spaces (RKHS) of vector-valued functions. We recall the one-to-one relationship of operator-valued kernels and RKHS, the concept of minimal norm interpolation in RKHS, and its extension to regularization approaches in a vector-valued setting. We then describe Gaussian process regression for learning vector-valued functions. We present the weight-space view using Bayesian inference and the corresponding function-space view based on the assumption that the predictive function is drawn from a vector-valued Gaussian process. Furthermore, we show that both perspectives lead to the same regularized risk functional, which is a consequence of the correspondence of RKHS and Gaussian processes. Using the theory of RKHS discussed in the first chapter, we extend different methods for scalar measurements to the case of vector-valued data. The advantage of our...

 [Read Kernel-based Methods for Parameter Estimation in Multidimensional Systems Online](#)

 [Download PDF Kernel-based Methods for Parameter Estimation in Multidimensional Systems](#)

Other Books



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Read eBook »](#)



The L Digital Library of genuine books(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date: 2002 Publisher: the BUPT title: Digital Library Original Price: 10 yuan...

[Read eBook »](#)



Art appreciation (travel services and hotel management professional services and management expertise secondary vocational education teaching materials supporting national planning book)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pages Number: 146 Publisher: Higher Education Pub. Date :2009-07-01 version 2. This book is...

[Read eBook »](#)



Medical information retrieval (21 universities and colleges teaching information literacy education family planning)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Pages Number: 269 Publisher: Huazhong Pub. Date :2011-07-01 version 1. The Internet age. information...

[Read eBook »](#)



Ella the Doggy Activity Book (Paperback)

Husky Publishing, United States, 2015. Paperback. Book Condition: New. 254 x 203 mm. Language: English . Brand New Book ***** Print on Demand *****.This activity book is comprised of crossword puzzles, word search games, word...

[Read eBook »](#)