PROSSIMO SEMINARIO

GIACOMO PETRILLO

DIPARTIMENTO DI STATISTICA, INFORMATICA, APPLICAZIONI

8 Aprile 2022 ore 11

Aula 205 (ex32), Viale Morgagni 59[†] e Online[*]

A NEW PROGRAMMING INTERFACE FOR GAUSSIAN PROCESS REGRESSION

A Gaussian process is a multivariate Normal distribution over a space of functions. Gaussian processes are commonly used as a prior in a Bayesian setting to infer an unknown function without specifying a finitely parameterized model. (In non-Bayesian contexts, this is known as kriging.) This technique is very flexible, but at the same time allows to provide strong prior information, when available, which would be difficult to encode in a model, like the degree of smoothness of the function or its periodicity. From the point of view of non-statisticians or applied statisticians, Gaussian processes are used through a pre-written program, much like most statistical methods. I will present a Python module designed for the task which introduces a new kind of interface to define the structure of the problem and manipulate the information, focused on maintaining a high degree of flexibility while keeping the user code as short and readable as possible. I will show how the program improves on existing implementations, then I will continue with some ideas for its future development, trying to fill in what is missing in other programs.

Referente: Fabio Corradi
Tutti gli interessati sono cordialmente invitati a partecipare
Ulteriori informazioni al link: http://local.disia.unifi.it/seminari.php

[†] Per partecipare in presenza è necessario iscriversi al link:
https://labdisia.disia.unifi.it/reserve205/prenoto.php
selezionando l'evento.

[*] Per partecipare online con Webex:
https://unifirenze.webex.com/unifirenze/j.php?MTID=m2df60ec553d199fcc8479963b3f5b329
Numero riunione: 2742 888 6223