On Space-time local interaction machines

This presentation will focus on the development of local interaction machines (SLIMs) for scalar and vector (multi-output) spatiotemporal processes. SLIMs employ sparse precision matrices which can significantly improve the computational efficiency of regression tasks compared to the Gaussian process framework. The construction of permissible precision matrices that can incorporate general distance measures will be discussed. Parameter estimation and regression equations based on these precision matrices will be presented, and example datasets will be used to illustrate the application of SLIMs.

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Invited by: Arthur Guillaumin
Authors: Dionissios Hristopulos - Technical University of Crete (Greece) [presenting]
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