



SEMINARIO DE ANÁLISIS NUMÉRICO DE ECUACIONES DIFERENCIALES PARCIALES

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Título de la Charla:

***Enhanced data representability via nonlinear dimensionality
reduction and multiple kernel learning***

Fecha y Hora:

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Lugar:

Auditorio Alamiro Robledo, FCFM, Universidad de Concepción.

Resumen

A nonlinear dimensionality reduction (NLDR) framework that allows to incorporate prior knowledge about the data is proposed. This is obtained by using a multiple kernel learning scheme into the NLDR optimization problem, in search of low-dimensional spaces that enhance the data representability. Our approach is tested for revealing the spatial and temporal dynamics of real-world videos related to cyclic motions. Moreover, we show how class label information can be included into the mapping process to facilitate further classification stages. Our framework assess automatically the importance of different sources of information into the NLDR mapping. Attained results show how our proposal facilitates visualization and classification tasks in machine learning systems.

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