
Seminario: "Applications of Inductive Logic Programming (ILP) in Molecular Biology problems"

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Applications of Inductive Logic Programming (ILP) to Problems in Molecular Biology

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Inductive Logic Programming (ILP) is a research area within Machine Learning that can be used to represent structured data and to learn models of complex interactions. ILP benefits from the use of a subset of First Order Logic to represent both models (so-called hypotheses) and data (or examples). The expressiveness of Logic and the fact that the expert often provides the building blocks of the models (the background knowledge) gives a second benefit: the fact that the constructed models are often comprehensible to experts. More recent work in ILP systems has made it possible to harmoniously combine numerical computations with relational data.

In this talk we give a light overview on ILP fundamentals, while focusing on applications on the Bioinformatics area. The applications include drug design problems, problems in genomics and proteomics, medicine etc. We also point at recent developments in using regression and probabilistic model within the ILP setting.

The talk is intended for Bioinformatics researchers with non ILP background.

Data:

28 de Setembro 2007, 12pm

Lugar de celebración:

Sala de access grid.

CESGA.

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