



UNIVERSITÀ  
di VERONA

Scuola di Dottorato  
di SCIENZE NATURALI ED INGEGNERISTICHE

Corso di Dottorato in Informatica

# “Surrogate Losses and Semi-Supervised Learning”

February 7<sup>th</sup>, 2018 - h. 11.00

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## Abstract

Because of the computational complexity of various optimization problems in machine learning, one often resorts to the minimization of a so-called surrogate loss that turns the inherently problematic objective function into a convex one. Supervised classification is a basic setting in which such surrogate losses are widely used. The discrepancy between the loss of ultimate interest and the loss optimized can cause unexpected, even counterintuitive, behavior. This poses challenges with respect to the development of learning theories. I exemplify the latter issue through the problem of semi-supervised learning and, in particular, by the question in what way it can lead to performance improvements over standard supervised classification.

## Short bio

Marco Loog received an M.Sc. degree in mathematics from Utrecht University and a Ph.D. degree from the Image Sciences Institute. He is currently affiliated to the Pattern Recognition Laboratory at Delft University of Technology. Marco is also an honorary professor in pattern recognition at the University of Copenhagen. His principal research interest is with supervised pattern recognition in all sorts of shapes and sizes.

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The lecture will take place at **11.00 – Sala Verde – Cà Vignal – Strada Le Grazie, 15**

Local organization and contact:

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