



Jean-Baptiste Fermanian is currently a post doctoral researcher at INRIA, Montpellier, France. Working on machine learning, he is interested in quantifying uncertainty in particular for plant recognition using conformal prediction, which is a statistical tool to post process the outputs of a trained model..

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10h30 – 12h00

Salle 201, Bâtiment PS2, CIRAD-UMR AMAP,
Boulevard de la Lironde
Visioconference : [LINK](#)

Conformal prediction for plant recognition: long tailed and multiple inputs

presented by

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ABSTRACT

Conformal prediction methods are statistical tools designed to quantify uncertainty and generate predictive sets with guaranteed coverage probabilities. The two works I will present, introduce refinements to these methods for classification tasks, one specifically tailored for long-tailed classification and, the other one, for scenarios where multiple observations (multi-inputs) of a single instance are available at prediction time. Our approach is particularly motivated by applications in citizen science such as Pl@ntnet, where the distribution of species has this behavior and where multiple images of the same plant or animal are captured by individuals at test time. These works have been done in collaboration with Joseph Salmon (UM), Tiffany Ding (UC Berkeley) and Mohamed Hebiri (Université Gustave Eiffel).

KEY WORDS

Conformal prediction, plant recognition, multiple inputs, long tailed

Invited and animated by:

Jean-Baptiste Durand

Type:

Research results

Oral language:

english / français

Language of PPT:

english

Visioconference Link:

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