

Advanced machine learning

ECTS : 3

Volume horaire : 24

Description du contenu de l'enseignement :

This research-oriented module will focus on advanced machine learning algorithms, in particular in the Bayesian setting

1) Bayesian Machine Learning (with Moez Draief, chief data scientist CapGemini)

- Bayesian linear regression
- Gaussian Processes (i.e. kernelized Bayesian linear regression)
- Approximate Bayesian Inference
- Latent Dirichlet Allocation

2) Bayesian Deep Learning (with Julyan Arbel, CR INRIA)

- MCMC methods
- variationnal methods

3) Advanced Recommendation Techniques (with Clement Calauzene, Criteo)

Compétence à acquérir :

Probabilistic, Bayesian ML and recommandation systems

Mode de contrôle des connaissances :

- Chaque étudiant devra présenter un papiers de recherche

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