Nicolas Jouvin
Researcher in Statistics

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Born on November 7, 1993

Current position

2022- …	**INRAE researcher**, MIA-Paris-Saclay

Past experience

2021-2022	**Postdoc in statistics**, Ecole Centrale Lyon - Institut Camille Jordan *Sparse estimation of mixture models.* Supervised by Yohann De Castro (EC Lyon).

Education

2017 - 2020	**PhD in applied statistics**, SAMM - Institut Curie *High-dimensional data and graph clustering with discrete latent variable models.* Supervisors: Pierre Latouche (MAP5), Charles Bouveyron (J.A. Dieudonné) & Alain Livartowski (Institut Curie).
2016 – 2017	**Master in Mathematics, Computer Vision and Machine Learning**, ENS Cachan (now ENS Paris-Saclay)
2015 - 2016	**Master in Applied Mathematics**, Université Paris I Panthéon-Sorbonne
2012 – 2015	**Bachelor in Applied Mathematics**, Université Paris I Panthéon-Sorbonne

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Research experience

Publications and preprints

Etienne Côme and Nicolas Jouvin (May 2022). "greed: An R Package for Model-Based Clustering by Greedy Maximization of the Integrated Classification Likelihood". working paper or preprint
Package paper: HAL preprint and Package website

Nicolas Jouvin, Charles Bouveyron, and Pierre Latouche (2021). "A Bayesian Fisher-EM algorithm for discriminative Gaussian subspace clustering"
Version: HAL or Journal

Etienne Côme, Nicolas Jouvin, Pierre Latouche, and Charles Bouveyron (2021). "Hierarchical clustering with discrete latent variable models and the integrated classification likelihood". French. In: *Advances in Data Analysis and Classification*
Version: HAL or Journal

Nicolas Jouvin, Pierre Latouche, Charles Bouveyron, Guillaume Bataillon, and Alain Livartowski (2020). "Greedy clustering of count data through a mixture of multinomial PCA". in: *Computational Statistics*
Version: HAL or Journal

Talks and scientific communications

April 2023	**Statlearn**, *Mixture of Poisson PCA for joint clustering and dimension reduction of count-data*, Montpellier - France
June 2022	**Journée de statistiques 2022**, *Model-Based Clustering by Greedy Maximization of the Integrated Classification Likelihood*, Lyon - France

March 2022	**Séminaire Statistique au sommet de Rochebrune 2022**, *Classification hierarchique basée sur une maximisation gloutonne de l'ICL*, Megève - France
Janvier 2022	**INRIA *maasai* seminar (remote)**, *Joint clustering and dimension reduction with the Bayesian Fisher-EM algorithm*, Virtual
Septembre 2021	**Rencontres statistiques lyonnaises**, *Modèles de mélanges et clustering : application aux données de grande dimension*, Institut Camille Jordan - Lyon - France
July 2021	**2021 ISBA World Meeting (remote)**, *Joint clustering and dimension reduction with the Bayesian Fisher-EM algorithm*, Virtual
June 2021	**52e Journées de Statistique (remote)**, *A Bayesian Fisher-EM algorithm for discriminative Gaussian subspace clustering*, Virtual
April 2021	**Séminaire de statistiques du MAP5 (remote)**, *A Bayesian Fisher-EM algorithm for discriminative Gaussian subspace clustering*, Laboratoire MAP5, Université de Paris, France
April 2021	**Séminaire du LMO (remote)**, *Model-based hierarchical clustering with the integrated classification likelihood*, Laboratoire de mathématiques d'Orsay, Orsay, France
March 2021	**Séminaire du MIA-Paris (remote)**, *Greedy clustering of count data through a mixture of multinomial PCA*, Laboratoire MIA-Pairs, INRAE, France
January 2021	**Séminaire du MSI-DHlab (remote)**, *Clustering high-dimensional count data through a mixture of multinomial PCA*, Maison de la Modélisation, de la Simulation et des Interactions, Nice, France
June 2019	**SAMM laboratory PhD seminar**, *Clustering anatomopathological reports with a mixture of multinomial PCA*, Université Paris 1 Panthéon-Sorbonne, Paris, France
June 2019	**51e Journée de Statistiques**, *Mixture of multinomial PCA*, Université de Lorraine, Nancy, France
January 2019	**The mathematics of imaging - CIRM winter school**, *Mixture of multinomial PCA: towards a joint analysis of histopathological texts and images*, Centre international de recherche en mathématiques, Marseille, France.
November 2018	**Welcome day for PhD students**, Fondation Science Mathématiques de Paris, Paris, France

Research internships

April-Sept. 2017	**Hierarchical clustering in discrete finite mixture models**, MAP5, supervised by Pr. Pierre Latouche (MAP5) & Pr. Charles Bouveyron (MAP5)
June-July 2016	**Comprehensible models for regression and classification**, LAL - CDS, supervised by Pr. Balazs Kegl

Students

Internships

2023	**Khaled Bouguila**, M1 student at ENSTA Paris 2 month internship on Poisson log-normal quadratic discriminant analysis
2022	**Illia Bovtriuk**, Taras Schevchenko National University of Kyiv 3 month internship on supervised classification of bovine embryo-genesis videos for the RAMP Studio data-challenge Bovine Embryos Movies

Teachings

2022-today	**Associate professor at Paris-Saclay (48h/year)** Teacher in *M2 data-science: santé, assurance et finance.* I teach latent variable modeling, scientific programming and monitor machine learning project and apprenticeship students.

2021 **Teaching assistant at École Centrale Lyon (40h/year)**
Convex and non-convex optimisation in finite dimension, integration and measure, ODE

2017– 2020 **Teaching assistant at Université Paris 1 (64 h/year)**
analysis, scientific programming, machine learning