Nicolas Jouvin

Post-doctorate researcher in Statistics

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Born on November 7, 1993

Current position

2021-. . . **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).
2021 Classification Society Dissertation Award (Honourable mention)

2016 – 2017 **Master in Mathematics, Computer Vision and Machine Learning**, ENS Cachan.

2015 - 2016 **Master in Applied Mathematics**, Université Paris I Panthéon-Sorbonne.

2012 – 2015 **Bachelor in Applied Mathematics**, Université Paris I Panthéon-Sorbonne.

Research experience

Publications and preprints

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

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 **51^{e} 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.

Teachings

2017– 2020 **Teaching assistant**, 1st, 3rd and 4th year of undergraduate, Université Paris 1.

- 30h/y, L1 MIASHS, Calculus
- 24h/y, M1 MAEF, Introduction to data analysis (statistics, supervised and unsupervised learning, visualisation, programming with R)
- 24h/y, L3 MIASHS, scientific computing with Python (Numpy, Pandas, scikit-learn).

2015 - 2017 **Tutoring**, Université Paris 1, Mathematics for the first year of undergraduate studies.

Skills

Languages French (native), English (fluent)

Computer skills
- *Coding:* R, Python, Matlab (notions)
- LaTeX, Git, Mardown

Hobbies

Sports Climbing, Hiking

Literature Philosophy, Science-fiction