Julien GIBAUD
Teaching fellow

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https://github.com/julien-gibaud
https://julien-gibaud.github.io/

Professional experience

2022 – 2023 **Teaching fellow,** Paul Valéry University, Montpellier, France

2019 – 2022 **PhD student without teaching activity,** University of Montpellier, Institut Montpelliérain Alexander Grothendieck (IMAG), France

Education

2019 – 2022 **PhD in Statistics,** University of Montpellier, IMAG, France
Title: *Supervised component-based generalized linear regression for the joint modeling of responses*
The jury was composed by: • **Jean-Noël BACRO**, Professor, University of Montpellier, President of the jury • **Xavier BRY**, Associate professor, University of Montpellier, Co-supervisor • **Marie CHAVENT**, Professor, University of Bordeaux, Examiner • **Fabien LAROCHE**, Permanent researcher, INRAE Toulouse, Examiner • **Jérome SARACCO**, Professor, Polytechnic Institute of Bordeaux, Referee • **Catherine TROTTIER**, Associate professor, Paul Valéry University - Montpellier 3, Supervisor • **David I. WARTON**, Professor, University of New South Wales - Sydney, Referee

2017 – 2019 **Master in Applied Mathematics,** University of Toulouse, France
Specialization: *Applied mathematics for engineering, industry and innovation*

2013 – 2016 **Bachelor in Mathematics,** University of Albi, France
Specialization: *General mathematics*

Scientific productions

Summary of my research activities

1 Article in international refereed journal

1 Submitted article

2 Talks in international conferences

4 Talks in national conferences

4 Seminars

1 Software

Articles in international refereed journals

1 **Gibaud J.**, Bry X., Trottier C., Mortier F. and Réjou-Méchain M. (2022). Response mixture models based on supervised components: Clustering floristic taxa. *Statistical Modelling*

Submitted articles

1 Heuclin B., **Gibaud J.**, Mortier F., Trottier C., Tisné S. and Denis M. Bayesian sparse group selection with indexed regressors within groups: the group fused horseshoe prior. *Submitted to Journal of Agricultural, Biological and Environmental Statistics*

Talks in international conferences

2 **Gibaud J.**, Bry X. and Trottier C., "Supervised Component-based Generalized Linear Regression with conditionally covarying responses", *24th International Conference on COMPutational STATistics*, Bologna, Italy (2022)

1 **Gibaud J.**, Bry X. and Trottier C., "Response clustering in component-based GLM", *19th Conference of the Applied Stochastic Models and Data Analysis international society (virtual event)*, Athens, Greece (2021)

Talks in national conferences

4 **Gibaud J.**, Bry X. and Trottier C.,"Modèles linéaires généralisés multivariés à composantes supervisées et facteurs latents, avec partitionnement thématique des variables explicatives", *53èmes Journées de Statistique de la Société Française de Statistique*, Lyon, France (2022)

3 **Gibaud J.**,"Régression linéaire généralisée multi-tableaux sur composantes supervisées pour les modèles à facteurs latents", *9ème Rencontre des Jeunes Statisticien·nes*, Porquerolles, France (2022)

2 **Gibaud J.**, Bry X. and Trottier C.,"Régression linéaire généralisée sur composantes supervisées pour les modèles à facteurs latents", *52èmes Journées de Statistique de la Société Française de Statistique (événement en ligne)*, Nice, France (2021)

1 **Gibaud J.**, Bry X. and Trottier C., "Supervised Component-based Generalized Linear Regression with finite mixture models of responses", *41st Conference on Applied Statistics in Ireland (virtual event)*, Maynooth, Ireland (2021)

Seminars

4 **Gibaud J.**, Bry X. and Trottier C.,"Modèles linéaires généralisés multivariés à composantes supervisées et facteurs latents, avec partitionnement thématique des variables explicatives", *ANR GAMBAS meeting*, Montpellier, France (2022)

3 **Gibaud J.**, Bry X. and Trottier C.,"Modèles linéaires généralisés multivariés à composantes supervisées et facteurs latents, avec partitionnement thématique des variables explicatives", *Seminar for PhD students*, Montpellier, France (2022)

2 **Gibaud J.**, Bry X. and Trottier C., "Régression linéaire sur composantes supervisées pour les modèles à facteurs latents", *Structural dependency modeling working group*, Montpellier, France (2021)

1 **Gibaud J.**, Bry X. and Trottier C., "Régression linéaire généralisée sur composantes supervisées pour la modélisation jointe des réponses", *Seminar for PhD students*, Montpellier, France (2020)

Software

1 Development of the R package **rmSCGLR**. This package is available at https://github.com/julien-gibaud/rmSCGLR.

Research projects

2019 – 2023 Member of the GAMBAS project, "Generating Advances in Modeling Biodiversity And ecosystem Services: statistical improvements and ecological relevance of joint species distribution models". This project is funded by the French Agence Nationale de la Recherche (ANR-18-CE02-0025). Coordinator: Frédéric MORTIER.

Teaching activities

Paul Valery University - Montpellier 3, France

2022 – 2023 Descriptive statistics in social sciences (First year, 67 hours); Exploratory analysis of the data (First year, 18 hours); Bivariate probabilities and statistics (Second year, 20 hours); Statistics tools I (Second year, 30 hours); Statistics tools II (Second year, 36 hours); Multivariate statistics (Fourth year, 21 hours)

2020 – 2021 Descriptive statistics in social sciences (First year, 36 hours)

2019 – 2020 Descriptive statistics in social sciences (First year, 36 hours)

Involvement in the scientific life

2021 – 2022 Co-organizer of the seminar for PhD students of the IMAG with Nathan LOMBARD and Raphaël PAEGELOW.