

# Paul Labonne

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Website: <https://paullabonne.github.io>  
Github: <https://github.com/paullabonne>

Time series predictive modelling & Software development for machine learning applications

## Education

	<b>King's College London</b>
2022	PhD Economics, scholarship from ESCoE
	<b>University of Warwick</b>
2016	MSc Economics
	<b>Paris School of Economics</b>
2015	MA Economics
	<b>University Paris 1 Panthéon-Sorbonne</b>
2014	BSc Econometrics

## Work experience

	<b>BI Norwegian Business School</b>
2021 - 2025	Postdoc
	<b>Office for National Statistics</b>
2017 - 2021	Researcher - Seconded from ESCoE
	<b>King's College London</b>
2018 - 2020	Teaching Assistant
	<b>National Institute of Economic and Social Research (NIESR)</b>
2017	Research internship
	<b>European Investment Bank</b>
2017	Graduate internship, Economics Department

## Scientific programming and software development

**R** - created [BayesMultiMode](#), available on [CRAN](#) / **Python** with [JAX](#), NumPy, pandas, PyTorch / **C++** with [Rcpp](#) and [CppAD](#) / **Git** / AWS and GCP / Unit testing / **Docker**  
see my [Github](#) for a full overview

## Machine learning

Regression analysis / [Forecasting](#) / [Nowcasting](#) / Big data (PCA, Ridge / LASSO) / Filtering (Kalman & score driven) / Risk & uncertainty / [Bootstrap](#), Monte Carlo / [Maximum likelihood](#) / Bayesian analysis / Backpropagation with automatic differentiation / NLP (word2vec) / Trend and seasonality / [Temporal disaggregation](#)

## Languages

French (native), English (fluent)

# Academic Annex - Paul Labonne

## Publications

- [BayesMultiMode: Bayesian mode inference in R](#)  
with Nalan Basturk, Jamie Cross, Peter de Knijff, Lennart Hoogerheide and Herman K. van Dijk  
*Journal of Statistical Software*, accepted
- [Asymmetric uncertainty: nowcasting using skewness in real-time data](#)  
*International Journal of Forecasting*, 2024
- [Bayesian mode inference for discrete distributions in economics and finance](#)  
with Jamie Cross, Lennart Hoogerheide and Herman K. van Dijk  
*Economics Letters*, 2024
- [Temporal disaggregation of overlapping noisy quarterly data: Estimation of monthly output from UK Value Added Tax data](#)  
with Martin Weale  
*Journal of the Royal Statistical Society A*, 2020
- [The financial foundations of the productivity puzzle](#)  
with Jagjit S. Chadha and Amit Kara  
*National Institute Economic Review*, 2017

## Working papers

- [Risky news and credit market sentiment](#)  
with Leif Anders Thorsrud
- [Flexible Negative Binomial Mixtures for Credible Mode Inference in Heterogeneous Count Data from Finance, Economics and Bioinformatics](#)  
with Jamie Cross, Lennart Hoogerheide and Herman K. van Dijk

## Peer-review activity

International Journal of Forecasting