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Biography

Ruben Loaiza-Maya is a Lecturer in the Department of Econometrics and Business Statistics. He completed his doctoral studies in econometrics at the University of Melbourne and his undergraduate degree in economics at the Universidad Nacional de Colombia (Medellin).

His research interests include:
Copula Modelling; Bayesian Estimation Methods; Time Series Analysis; Macroeconomic and Financial Forecasting;

Employment

Senior Research Fellow
Econometrics & Business Statistics
MONASH UNIVERSITY
1 Jul 2020 → present

Research outputs

Bayesian forecasting in economics and finance: a modern review
Martin, G. M., Frazier, D. T., Maneesoonthorn, W., Loaiza-Maya, R., Huber, F., Koop, G., Maheu, J., Nibbering, D. & Panagiotelis, A., Apr 2024, In: International Journal of Forecasting. 40, 2, p. 811-839 29 p.

Hybrid unadjusted Langevin methods for high-dimensional latent variable models
Loaiza-Maya, R., Nibbering, D. & Zhu, D., Apr 2024, In: Journal of Econometrics. 241, 2, 18 p., 105741.

ABC-based forecasting in misspecified state space models
Weerasinghe, C., Loaiza-Maya, R., Martin, G. M. & Frazier, D. T., 2024, (Accepted/In press) In: International Journal of Forecasting. 20 p.

Efficient importance variational approximations for state space models
Loaiza-Maya, R. & Nibbering, D., 2024, (Accepted/In press) In: Journal of Business and Economic Statistics. 13 p.

Loss-Based Variational Bayes Prediction
Frazier, D. T., Loaiza-Maya, R., Martin, G. M. & Koo, B., 2024, (Accepted/In press) In: Journal of Computational and Graphical Statistics. 31 p.

Natural gradient hybrid variational inference with application to deep mixed models
Zhang, W., Smith, M., Maneesoonthorn, W. & Loaiza-Maya, R., 2024, In: Statistics and Computing. 34, 6, 17 p., 185.

Fast variational bayes methods for multinomial probit models
Loaiza-Maya, R. & Nibbering, D., 2023, In: Journal of Business and Economic Statistics. 41, 4, p. 1352-1363 12 p.

Implicit copula variational inference
Smith, M. S. & Loaiza-Maya, R., 2023, In: Journal of Computational and Graphical Statistics. 32, 3, p. 769-781 13 p.

Variational Bayes in state space models: inferential and predictive accuracy
Frazier, D. T., Loaiza-Maya, R. & Martin, G. M., 2023, In: Journal of Computational and Graphical Statistics. 32, 3, p. 793-804 12 p.

Fast and accurate variational inference for models with many latent variables
Loaiza-Maya, R., Smith, M. S., Nott, D. J. & Danaher, P. J., Oct 2022, In: Journal of Econometrics. 230, 2, p. 339-362 24 p.

Optimal probabilistic forecasts: when do they work?
Martin, G. M., Loaiza-Maya, R., Maneesoonthorn, W., Frazier, D. T. & Ramírez-Hassan, A., Jan 2022, In: International Journal of Forecasting. 38, 1, p. 384-406 23 p.

Scalable Bayesian estimation in the multinomial probit model
Loaiza-Maya, R. & Nibbering, D., 2022, In: Journal of Business and Economic Statistics. 40, 4, p. 1678-1690 13 p.

Focused Bayesian prediction
Loaiza-Maya, R., Martin, G. M. & Frazier, D. T., Aug 2021, In: Journal of Applied Econometrics. 36, 5, p. 517-543 27 p.

Advertising effectiveness for multiple retailer-brands in a multimedia and multichannel environment
Danaher, P. J., Danaher, T. S., Smith, M. S. & Loaiza-Maya, R., Jun 2020, In: Journal of Marketing Research. 57, 3, p. 445-467 23 p.

High-dimensional copula variational approximation through transformation
Smith, M. S., Loaiza-Maya, R. & Nott, D. J., 2020, In: Journal of Computational and Graphical Statistics. 29, 4, p. 729-743 15 p.

Real-time macroeconomic forecasting with a heteroskedastic inversion copula
Loaiza-Maya, R. & Smith, M. S., 2020, In: Journal of Business and Economic Statistics. 38, 2, p. 470-486 17 p.

Variational Bayes estimation of discrete-margined copula models with application to time series
Loaiza-Maya, R. & Smith, M. S., 3 Jul 2019, In: Journal of Computational and Graphical Statistics. 28, 3, p. 523-539 17 p.

Time series copulas for heteroskedastic data
Loaiza-Maya, R., Smith, M. S. & Maneesoonthorn, W., 1 Apr 2018, In: Journal of Applied Econometrics. 33, 3, p. 332-354 23 p.

Bayesian combination for inflation forecasts: the effects of a prior based on central banks' estimates
Melo, L. F., Loaiza, R. A. & Villamizar-Villegas, M., 1 Sept 2016, In: Economic Systems. 40, 3, p. 387-397 11 p.

Latin american exchange rate dependencies: A regular vine copula approach
Loaiza Maya, R. A., Gomez-Gonzales, J. E. & Melo Velandia, L. F., Jul 2015, In: Contemporary Economic Policy. 33, 3, p. 535-549 15 p.

Exchange rate contagion in Latin America
Loaiza-Maya, R. A., Gomez-Gonzales, J. E. & Melo-Velandia, L. F., 1 May 2015, In: Research in International Business and Finance. 34, p. 355-367 13 p.