

# Matías Altamirano Montero

20/12/1995  
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## EDUCATION

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<b>University College London</b> MPhil/PhD in Statistical Science	London, UK 2022–Present
<b>Universidad de Chile</b> M.S. in Engineering Sciences, Applied Mathematics – Thesis: “Nonstationary multi-output Gaussian processes via harmonizable spectral mixtures” – Supervisor: Dr. Felipe Tobar	Santiago, Chile 2020–2021
<b>École Centrale Paris</b> Student Exchange Program	Paris, France Spring 2017
<b>Universidad de Chile</b> B.S. in Engineering Sciences, Mathematics	Santiago, Chile 2014–2019

## PUBLICATIONS

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- [1] **M. Altamirano**, F.-X. Briol, and J. Knoblauch, “Robust and scalable Bayesian online changepoint detection”, in *Proceedings of the 40th International Conference on Machine Learning*, PMLR, 2023, pp. 642–663.
- [2] **M. Altamirano**, F.-X. Briol, and J. Knoblauch, “Robust and conjugate Gaussian process regression”, *arXiv preprint arXiv:2311.00463*, 2023.
- [3] **M. Altamirano** and F. Tobar, “Nonstationary multi-output Gaussian processes via harmonizable spectral mixtures”, in *Proceedings of The 25th International Conference on Artificial Intelligence and Statistics*, PMLR, 2022, pp. 3204–3218.
- [4] **M. Altamirano**, P. Uribe, D. Schlotterbeck, A. Jiménez, R. Araya, J. van der Molen Moris, and D. Caballero, “Unsupervised characterization of lessons according to temporal patterns of teacher talk via topic modeling”, *Neurocomputing*, 2021, ISSN: 0925-2312.
- [5] **M. Altamirano**, A. Jiménez, and R. Araya, “Lessons clustering using topics inferred by unsupervised modeling from textbooks”, in *International Conference in Methodologies and intelligent Systems for Technology Enhanced Learning*, Springer, 2020, pp. 85–94.

## EXPERIENCE

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<b>Universidad de Chile - Center for Mathematical Modeling</b> Research Assistant, Supervisor: Dr. Joaquín Fontbona	Santiago, Chile September 2021–June 2022
<b>Universidad de Chile - Center for Advanced Research in Education</b> Research Assistant, Supervisor: Dr. Roberto Araya	Santiago, Chile January 2021–January 2022
<b>Universidad de Chile - Center for Advanced Research in Education</b> Research Assistant, Supervisor: Dr. Roberto Araya	Santiago, Chile March 2019–February 2020

**KPMG**  
Internship

Santiago, Chile  
Summer 2019

**Universidad de Chile - Center for Advanced Research in Education**  
Research internship, Supervisor: Dr. Patricio Rodríguez

Santiago, Chile  
Summer 2018

## SCHOLARSHIPS & AWARDS

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- Poster prize winner, UCL Departmental poster session 2023
- UCL Departmental Teaching Assistant studentship for 3.5 years 2022
- Best thesis, Msc in applied mathematics, Universidad de Chile 2022
- Best Paper Award at 10th International Conference in Methodologies and Intelligent Systems for Technology Enhanced Learning 2020
- Center of Mathematical Modelling (CMM), Msc in applied mathematics Scholarship 2020
- Faculty of Physical and Mathematical Sciences, Universidad de Chile, Outstanding student 2015/2019

## TALKS & POSTERS

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- **Poster:** *Robust and conjugate Gaussian process regression*, UCL Statistical Science Departmental Poster session, **Poster prize winner**, London, UK November 2023
- **Poster:** *Robust and scalable Bayesian online changepoint detection*, International Conference on Machine Learning, Hawaii, US July 2023
- **Talk:** *Robust and scalable Bayesian online changepoint detection*, UCL Distance-based methods in Machine Learning workshop, London, UK June 2023
- **Poster:** *Robust and scalable Bayesian online changepoint detection*, SIAM UKIE National Student Chapter Conference, Oxford, UK June 2023
- **Poster:** *Robust and scalable Bayesian online changepoint detection*, London Symposium on Information Theory, London, UK May 2023

## SERVICES TO THE COMMUNITY

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- **Reviewing activities:** AISTAS (2024, 2023), Neurips (2023), ICML (2023 Workshop on Structured Probabilistic Inference & Generative Modeling)

## TEACHING

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- **Teaching Assistant** at Universidad de Chile 2016-2020  
*Multivariable Calculus (Fall 2016/Fall 2018/Fall 2019/Spring 2019/Fall 2020), Advanced Calculus and Applications (Spring 2019), Linear Algebra (Spring 2017/Spring 2018), Introduction to Calculus (Spring 2017)*
- **Teaching Assistant** at UCL 2023  
*STAT0004, STAT0005, STAT0023, STAT0040*

## CODING AND COMPUTER SKILLS

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- **Languages:** Python, Matlab, Java, SQL, R
- **Additional Skills:** Linux,  $\text{\LaTeX}$ , Github

## LANGUAGES

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- **Spanish:** Native Speaker
- **English:** Advanced
- **French:** Basic

## REFERENCES

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- **Dr Jeremias Knoblauch (PhD First Supervisor):** Lecturer at UCL's Department of Statistical Science.  
j.knoblauch@ucl.ac.uk
- **Dr Francois-Xavier Briol (PhD Second Supervisor):** Lecturer at UCL's Department of Statistical Science.  
f.briol@ucl.ac.uk