# LUC BROGAT-MOTTE

Postdoctoral researcher in machine learning \$\displayluc.brogat.motte@gmail.com

#### **EDUCATION**

ENS Paris-Saclay

M.S. MVA Mathématiques, vision, apprentissage.

With honours 16.8/20.

Télécom Paris, Engineering School

Machine learning.

Probability theory, statistics, scientific computing.

GPA: 3.98 / 4.

Lycée Marcelin Berthelot, CPGE MPSI/MP\*

2013-2016

Preparatory classes: undergraduate intensive course in mathematics and physics.

**EXPERIENCE** 

Postdoc on estimation of continuous-time stochastic dynamical systems

2025-

Supervised by Lorenzo Rosasco

(MaLGa, University of Genoa, Italian Institute of Technology, Massachusetts Institute of Technology).

Postdoc on estimation of controlled stochastic differential equations

2023-2025

Supervised by Riccardo Bonalli (L2S, CentraleSupélec), and Alessandro Rudi (SIERRA team, INRIA Paris).

PhD in Mathematics and Computer Science, Télécom Paris

2019-2023

 $Statistical\ learning\ theory,\ kernel\ methods,\ optimal\ transport.$ 

2nd best thesis of IP Paris's computer science department (2024).

Reviewer for international machine learning journals and conferences

2019-

2019-2023

JMLR, SIAM Journal on Mathematics of Data Science (SIMODS), Artificial Intelligence Journal (AIJ), NeurIPS, AISTATS, ECML PKDD.

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Teaching assistant, Télécom Paris

Teaching tutorials and creating original practical sessions in statistics and machine learning.

Master research intern, Télécom Paris and Aalto University

Learning output representations in structured prediction with application to molecule prediction problems.

Digital Technician at National Institute of Integrative Medicine, Melbourne

Web development, computer graphics, and hardware installation.

July 2017

April - Sept. 2019

**PUBLICATIONS** 

Safely Learning Controlled Stochastic Dynamics. (Preprint)

Luc Brogat-Motte, Alessandro Rudi, Riccardo Bonalli.

Learning Controlled Stochastic Differential Equations. (Preprint)

Luc Brogat-Motte, Riccardo Bonalli, Alessandro Rudi.

Structured Prediction with Loss Regularization under Output Regularity Assumptions. (Preprint)

Luc Brogat-Motte, Florence d'Alché-Buc.

Sketch In, Sketch Out: Accelerating both Learning and Inference for Structured Prediction with Kernels.

(AISTATS 2024)

Tamim El Ahmad, Luc Brogat-Motte, Pierre Laforgue, Florence d'Alché-Buc.

## Learning to predict graphs with fused Gromov-Wasserstein barycenters. (ICML 2022)

Luc Brogat-Motte, Rémi Flamary, Céline Brouard, Juho Rousu, Florence d'Alché-Buc.

## Vector-valued least-squares regression under output regularity assumptions. (JMLR 2022)

Luc Brogat-Motte, Alessandro Rudi, Céline Brouard, Juho Rousu, Florence d'Alché-Buc.

## Duality in RKHSs with infinite dimensional outputs: Application to robust. (ICML 2020)

Pierre Laforgue, Alex Lambert, Luc Brogat-Motte, Florence d'Alché-Buc.

#### LANGUAGES AND SKILLS

Computer Languages	Advanced: Python, Latex; Proficient: C, Java, HTML, CSS, PHP, SQL, Javascript
Languages	French (native), english (fluent), spanish (basics), italian (basics)