## 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

2016-2019

2018-2019

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-

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

#### Teaching assistant, Télécom Paris

2019-2023

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

## Master research intern, Télécom Paris and Aalto University

April - Sept. 2019

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

## Digital Technician at National Institute of Integrative Medicine, Melbourne

July 2017

Web development, computer graphics, and hardware installation.

#### **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.

# 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 LanguagesAdvanced: Python, Latex; Proficient: C, Java, HTML, CSS, PHP, SQL, JavascriptLanguagesFrench (native), english (fluent), spanish (basics), italian (basics)