Caroline LAWLESS

NATIONALITY	Irish
DATE OF BIRTH	5 April 1994
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EDUCATION

2019 - PRESENT
DPhil (PhD) in Statistics
University of Oxford
"Advances in Bayesian asymptotics and Bayesian non-parametrics"
Supervisor: *Judith Rousseau* (University of Oxford)
Co-supervisors:*Christian Robert, Robin Ryder* (Université Paris Dauphine)

2018-2019
Masters in Mathematics and Applications
Statistics and machine learning
Ecole Normale Supérieure, Université Paris Dauphine (PSL) (France)

2014-2018
Bachelor of Mathematics,
Trinity College Dublin (Ireland)

PROFESSIONAL EXPERIENCE

JANUARY - JUNE 2022
Teaching **University of Oxford**
"Computational statistics" for 4th year undergraduates

SEPTEMBER - DECEMBER 2021
Teaching **Université Paris Dauphine**
"Modèles linéaires" for 3rd year undergraduates

JANUARY - JUNE 2021
Teaching **University of Oxford**
"Groups and group actions" for 1st year undergraduates

JUNE - JULY 2018
Research internship in statistics **Inria** Grenoble (France)
Supervised by **Julyan Arbel**
The Pitman–Yor process is a generalization of the Dirichlet process (a random measure often used in non-parametric Bayesian statistics)
Derivation of the "Chinese restaurant process" representation of the Pitman-Yor process from its "stick-breaking" representation

JULY - AUGUST 2017
Research internship in statistics **Trinity College** Dublin
Supervised by **Bernardo Nipoti**
Non-parametric modelling of infinite Gaussian mixture models
Use of "Variational Bayes," a method to approximate the posterior distribution of these models
Simulation studies using R

Academic Awards

2018	*Gold Medal Award,* **Trinity College** Dublin
	Prize for the top academic graduates of the year in Trinity
2018	Scholar of the programme *Paris Graduate School of Mathematics (PGSM),*
	Fondation Sciences Mathématiques de Paris (FSMP)
	Merit scholarship for a masters in Paris covering a full year's tuition and living expenses
2015, 2016, et 2017	*First Class Book Prize,* **Trinity College** Dublin
	Prize for the top students in mathematics
2014	*Entrance Exhibition Award,* **Trinity College** Dublin
	Merit scholarship for first year students in Trinity

Publications

2023	*Clustering inconsistency for Pitman–Yor mixture models with a prior on the precision but fixed discount parameter*
	Caroline Lawless, Julyan Arbel, Louise Alamichel, Guillaume Kon Kam King
	5th Symposium on Advances in Approximate Bayesian Inference link
2019	*A simple proof of Pitman–Yor's Chinese restaurant process from its stick-breaking representation.*
	Caroline Lawless and Julyan Arbel **Dependence Modelling** link

Languages

ENGLISH	First language
FRENCH	Bilingual

Computing

LANGUAGES	R, Python, LaTex
TOOLS	Git, GitHub

Hobbies

RUNNING	10km, half marathon, marathon
MUSIC	Piano