University College, High Street, Oxford, OX1 4BH, United Kingdom

# **Thomas Tendron**

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#### **EDUCATION**

• University of Oxford, Oxford, UK

September 2020 - June 2024 (expected)

**DPhil** at the Centre for Doctoral Training (CDT) in Mathematics of Random Systems.

• McGill University, Montréal, Canada

January 2019 - June 2020

M. A. in Mathematics.

B. A. Honours Mathematics, Minor in Computer Science

September 2015 - December 2018

First Class Honours in Mathematics.

# **PUBLICATIONS**

L. Addario-Berry, J. Lin, T. Tendron, (2021) *Barycentric Brownian Bees*, Annals of Applied Probability 2022, Vol. 32, No. 4, 2504-2539. ArXiv.

## WORK EXPERIENCE AND PROJECTS

# • Freelance Mathematician and Programmer

June 2021-

- 10 short projects with top reviews by engineering companies, start-ups, econometrics researchers, and students in quantitative fields.
- Graph algorithms, probability theory, statistics, and coding in *Python, C++ and Javascript*.
- DataSig Data Pre-processing for Automated Lip Reading based on Landmarks

May 2021

- Normalisation of 2D face and lip landmarks for lip-reading task in *Python*.
- Improved the testing accuracy of a deep learning model by 3.9% on average.
- Ericsson Software Developer Intern

Summer 2017

- Automated the build, testing, SonarQube analysis, test coverage reports, code-review scores and publishing. *Jenkins 2, Docker containers, Groovy, Bash, YAML, XML and Java.*
- Pipelines helped teams to adopt CI practices and increased code quality and testing by up to 50%.
- McGill University Health Centre Software Developer Intern

Summers 2016 and 2018

- 2018: front-end for a questionnaire system for cancer patients.
- 2016: website to connect cancer patients with their treatment team.
- JavaScript, HTML, CSS, Angular, Bootstrap, Firebase Database.

## TEACHING EXPERIENCE

- University of Oxford: Probability on Graphs and Lattices, Applied Probability, Probabilistic Combinatorics.
- McGill University: Differential Equations, Calculus, Advanced Probability Theory 1, Honours Probability.

# ADDITIONAL TRAINING

- **Kaggle Certificates:** Pandas, Data Cleaning, Data Visualisation, Intro to and Intermediate Machine Learning, Feature Engineering, Time Series, Intro to Deep Learning, Intro to SQL.
- Languages: French (native), English (fluent), Spanish (CEFR B1), Mandarin (CEFR A1).

## INVITED (I) AND CONTRIBUTED (C) TALKS AND POSTERS

- 2022 PIMS-CRM Summer School in Probability, University of British Columbia, June 23, 2022. (C)
- Workshop: Branching Systems, Reaction-Diffusion Equations and Population Models CRM Montréal, May 3, 2022. (C)
- Etheridge Group Seminar, University of Oxford, July 7, 2021. (I)
- CDT Spring Retreat University of Oxford, June 10, 2021. (I)

# HONOURS AND AWARDS

Research Travel Grant - University College - University of Oxford

Oxford-Radcliffe Graduate Scholarship - University College - University of Oxford

Graduate Excellence Award - Dept of Maths & Stats - McGill University

Arts Undergraduate Research Internship Award - McGill University

March 2022

2020-2024

Winter 2019-Winter 2020

Summer 2018

HackHarvard Grand Prize, Wolfram Overall Winner - Harvard University

November 2015