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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.

WORK EXPERIENCE

- **J.P. Morgan - Quantitative Research Associate - PhD Off-Cycle Internship - London** — May-Sept. 2023
  - Developed a *Python* package for efficient pricing of OTC derivatives across asset classes.
    - Implemented custom scikit-learn estimators to compute conditional expectations and interpolations.
    - Used the estimators to price Bermudan swaptions and barrier stock options.
    - Applied agile practices and software design patterns in complex library for counterparty credit risk.
  - Gained exposure to cash equities market making business and models.
- **Mathematician and Programmer - Remote** — June 2021-August 2022
  - 10 short projects with top reviews by engineering companies, start-ups, researchers, and students in quantitative fields. Some code at https://github.com/ThomasTend.
  - Developed models in *Python*, *C++* and *JavaScript* using graph algorithms, probability theory, statistics.
- **DataSig - Data Pre-processing for Automated Lip Reading based on Landmarks - Oxford** — 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 - Montreal** — 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 agile CI practices and increased code quality and testing by up to 50%.
- **McGill University Health Centre - Software Developer Intern - Montreal** — 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.*

PUBLICATIONS

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

TEACHING

- **University of Oxford:** Market Microstructure and Algorithmic Trading, Applied Probability, Foundations of Statistical Inference, Probabilistic Combinatorics, Probability on Graphs and Lattices.
- **McGill University:** Differential Equations, Calculus, Advanced Probability Theory 1, Honours Probability.

SELECTED 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).

SELECTED INVITED (I) AND CONTRIBUTED (C) TALKS (T) AND POSTERS (P)

- **Quebec Analysis and Related Fields Seminar** - Online - January 26, 2023. (I, T)
- **2022 PIMS-CRM Summer School in Probability**, University of British Columbia, June 23, 2022. (C, T)
- **Workshop: Branching Systems, Reaction-Diffusion Equations and Population Models** - CRM Montréal, May 3, 2022. (C, P)

SELECTED HONOURS AND AWARDS

- **G-Research Quant Finance Challenge** Winning Team - University of Oxford — October 9, 2023
- **HackHarvard** Grand Prize, Wolfram Overall Winner - Harvard University — November 2015