

## SUMMARY

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Doctoral Student in Urban Analytics at the Alan Turing Institute and Leeds Institute for Data Analytics. Interested in developing a framework for exploring the response of typical statistical models to underlying social complexity assumptions. Generating complex artificial societies using Agent Based Models.

## EDUCATION

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<b>The Alan Turing Institute<sup>(1)</sup>, University of Leeds<sup>(2)</sup></b> Ph.D. in Urban Analytics, Advisors: Alison Heppenstall, Ed Manley. Focus: Exploring probabilistic graphical model response to social complexity: an ABM approach.	London <sup>(1)</sup> , Leeds <sup>(2)</sup>    2019–Current
<b>University of Leeds</b> M.S. in Data Analytics and Society (C.D.T. program) – Thesis: “Integrating social and spatial mechanisms in Agent Based models”	Leeds 2019–2021
<b>Aix-Marseille Université</b> M.S. in Statistics and Demography (M.A.S.S.), Honors – Thesis: “A multiscale approach for measuring complex segregation patterns”	Marseille 2018–2019
<b>École Centrale Paris</b> Grande École d’Ingenieur: M.S. in Civil Engineering.	Chatenay-Malabry 2013–2017
<b>Lycée Louis le Grand</b> Preparatory Class for the Grandes Écoles: Intensive program in Mathematics and Physics.	Paris 2011–2013

## EXPERIENCE

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<b>Laboratoire S.A.M.M., Université Paris 1, Panthéon Sorbonne</b> <i>Research Intern</i> , Measuring multi-scale segregation. – Developing a multi-scale multi-group spatial segregation index using KL divergence trajectories from local bespoke neighbourhoods. Application across European and American cities from decennial ethnic census data.	Paris 05/2019 - 09/2019
<b>Crossrail</b> <i>ATC, Certification</i> – Construction project of the Elisabeth line in London. Certification Manager: monitoring of electrical and mechanical post-installation tests. Reporting and customer links. Definition of the certification strategy on an ancillary contract.	London Summer 2018

## Inli

Paris

*Project Manager, Social Housing Development*

05/2017 - 11/2017

- Follow-up of the project from the feasibility study to the receipt of the operation: design, funding, and site supervision. Mission of financial valuation of the property assets.

## AKATRA

Tanarivo, Madagascar

*Project Manager, Volunteer*

01/2016 - 07/2016

- Organisation for the social integration through sports. Maths and Physics teacher for high-school scholarship program, rugby coach for high school girls team, project management, communication.

## Startsquare

Lyon, France

*Business Developer*

08/2015 - 01/2016

- Online meeting hub for research projects and entrepreneurs. Product definition, project selection and patent vulgarisation, marketing and communication.

## PUBLICATIONS

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- [1] C. de Bézenac, W. A. Clark, M. Olteanu, and J. Randon-Furling, “Measuring and visualizing patterns of ethnic concentration: The role of distortion coefficients”, *Geographical Analysis*,
- [2] M. Olteanu, C. de Bezenac, W. Clark, and J. Randon-Furling, “Revealing multiscale segregation effects from fine-scale data: A case study of two communities in paris”, *Spatial Demography*, pp. 1–13, 2020.
- [3] J. R.-F. C. de Bézenac, “A multiscale approach for measuring complex segregation patterns”, M.S. thesis, Paris 1 Pantheon Sorbonne, Université Aix Marseille, 90 rue Tolbiac, 75013, Sep. 2019, p. 52.

## RESEARCH PROJECTS

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- Integrating social and spatial mechanisms in Agent Based Models* 2021
  - Using Agent Based models to discuss the role of social networks and spatial considerations in system dynamics: the El Farol bar problem illustration.
- How well do Airbnb guests know the neighbourhood?* 2020
  - Identifying neighbourhood features in London from Airbnb comments (NLP).
- Understanding taxi tipping behaviour in New York City.* 2020
  - Identifying spatial and temporal patterns in tipping behaviour using Taxi and Limousine Commission records for New York City, 2019.
- Measuring and modeling health care deprivation.* 2019
  - Mapping the gap between health care supply and demand across France. Simulating GP mobility and life trajectories using an Agent Based framework.
- Modeling Self Accomplishment in an evolving social context.* 2019
  - Exploring the effect of wealth accumulation on self-accomplishment in an evolving social and political context using nested Agent Based models.

## AWARDS

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- **Ergapolis**, 2017 First Prize.  
Interdisciplinary urban planning student competition. Analysing and articulating the different urban typologies in the Vallée de la Seine, France. 2018–2020

## SKILLS

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- **Programming:** Python, R, SAS, Netlogo, SQL
- **Software:** Photoshop, InDesign, SketchUp

## LANGUAGES

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- **French:** Fluent, mother-tongue
- **English:** Fluent
- **German:** Intermediate, B2