Ketsia Guichard

PhD Candidate in Statistics

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Profile & Research Project

Currently a PhD Student in Applied Statistics, I have six years of experience as a Data Scientist. My professional journey has allowed me to develop expertise in handling real-world data and strong skills in knowledge dissemination. Following a teaching experience at an engineering school, my doctoral studies mark a new milestone, driven by my interest in ethical issues.

My research focuses on the partitioning of structured data, particularly attributed graphs. This project is motivated by the problem of partitioning road networks, stemming from research in transportation and mobility. Applications are conducted on real-world data from a citizen science project, thus aiming to better understand mobility in low-density areas.

Education

University of Rennes - IRMAR

Rennes

PHD CANDIDATE IN APPLIED STATISTICS

Since October 2023

Interdisciplinary statistical analysis of mobility patterns to understand needs and support transitions, under the supervision of Loïc Le Marrec, Véronique Thelen and Ioana Gavra

ENSAI - National Engineering School of Statistics and Information Analysis

Rennes

MASTER'S DEGREE

2012 - 2015

· Specialized in Quantitative Marketing

Lycée Michel de Montaigne

Bordeaux

LITERARY AND SCIENTIFIC PREPARATORY CLASS FOR FRENCH GRANDES ÉCOLES (B/L)

2010 - 2012

Program combining economics, social sciences, humanities, and mathematics, fostering problem-solving skills and interdisciplinarity

Research.

CONFERENCE TALKS

FRANCOPHONE MEETINGS ON TRANSPORT AND MOBILITY

Bruxelles (BE) - June 2024

Mobility in Medium-Density Areas : A Spatio-Temporal Exploration of Citizen Science Data

R MEETINGS Vannes (FR) - June 2024

telraamStats package: Mobility Patterns Visualization for Researchers and Citizens

Young Statisticians Meetings Porquerolles (FR) - April 2024

Exploration of Citizen Mobility Data: Case Study of the City of Châteaubourg

RENNES DOCTORAL RESEARCH DAY IN STATISTICS

Rennes - March 2024

Exploration of Citizen Mobility Data through Functional Data Analysis

SOFTWARE DEVELOPMENT

I am a contributor to the R package *telraamStats*, available directly on CRAN. This package allows easy retrieval of mobility sensor data from Telraam without using the API, as well as visualizing mobility information (speed, traffic, etc.). This general-purpose package is designed for a wide range of audiences, including various academic disciplines (statistics, mobility, economics, geography, etc.) as well as different professional profiles (research, associations, municipalities).

OTHER SCIENTIFIC ACTIVITIES

- Scientific Council of the Henri Lebesgue Center
- Co-organization of the IRMAR Doctoral Students' Statistics Seminar
- Co-organization of the Rennes Doctoral Students' Day in Statistics (March 2024)
- Scientific committee of the event "Equality and Science: The Role of Women" (March 2024)

Teaching

University of Rennes

ADJUNCT LECTURER Since September 2023

• Computing Tools (Algorithms) for Mathematics and Applications Studies - First Year (24 hours)

ENSAI - National Engineering School of Statistics and Information Analysis

Rennes

Since April 2022

Rennes

ADJUNCT LECTURER

• Lecture - Probability and Statistics (22 hours) - Master's Level (M1)

- Lecture Exploratory Statistics, Data Visualization, and Data Storytelling (24 hours) Postgraduate Level (Bac+6)
- Teaching Assistant Descriptive Statistics with SAS (30 hours) Undergraduate Level (L3)
- Teaching Assistant Introduction to Object-Oriented Programming and Code Documentation (42 hours) Undergraduate Level (L3)
- Teaching Assistant Markov Chains (18 hours) Master's Level (M1)
- Project Supervision Statistical Project with Real-World Data (36 hours 8 groups) Undergraduate Level (L3)
- Jury President Second-Year Statistical Project Master's Level (M1)
- Vice-Jury President Final-Year Thesis Defense Master's Level (M2)

Rennes 2 University Rennes

ADJUNCT LECTURER 2023-2024

Integrated Seminar - Mathematics for Social and Economic Administration Studies First year (24 hours)

Work Experience____

Leboncoin Paris

Fraud and Moderation Data Scientist

2019 - 2021

- · Automatic detecting various account fraud cases (compromise, fake accounts) supervised classification
- Recommendation of similar ads ElasticSearch
- Detecting search trends Prophet, FastText
- Other topics: exploratory analyses, churn scoring
- · Member of the Women in Tech committee: raising awareness about tech careers for young audiences, meetups

Louis Vuitton Paris

LEAD DATA SCIENTIST May 2018 - December 2018

- Developing of purchase prediction scores supervised classification and scoring methods
- Coordinating and implementing agile processes within a team of three contractor Data Scientists

Meetic Paris

CONSUMER JOURNEY DATA SCIENTIST

2016 - 2018

Designing and updating of matching algorithms
Analyzing A/B tests for user experience and new features

JobijobaBordeauxDATA SCIENTIST2015 - 2016

· Automatic profiling of visitors based on to their navigation on the website to enhance recommendation systems

· Constructing dashboards using RShiny

Other activities

FRESQUE DU SEXISME

Janvier 2023 - en cours

I am a facilitator for the Fresque du Sexisme. This is a 3-hour collective intelligence workshop aimed at deconstructing the mechanisms of sexism and envisioning a more equal society. Inspired by the format of the Climate Fresk, this workshop was created by the Fresque du Sexisme association and is currently being implemented throughout France.

Langues

French Native

EnglishWorking knowledgeTOEIC: 870/990 - B2 LevelGermanIntermediateWIDAF: 916/990 - C1 Level

Technical Skills_

Languages & Frameworks Python, R et R Shiny, Spark, Tensorflow, Keras

Databases SQL, NoSQL, MongoDB, BigQuery, AWS (Redshift, Athena)