AUDREY
POINSOT

CONTACT INFO

Affiliation	INIRA Saclay, Paris Saclay University, Ekimetrics
E-mail	audrey.poinsot@ekimetrics.com
Website	https://audreypoinsot.github.io/academic_website/

ABOUT ME

I am a second-year Ph.D. student at INRIA (Paris, France) under the supervision of Marc Shoenauer and Alessandro Leite.
At the **intersection of Causality and Machine Learning**, my current research project aims to improve decision-support tools with a specific interest in **robustness** and **uncertainty**. Having worked as a consultant for a year before starting my Ph.D. funded by this same company, my research is driven by concrete use cases and applications.
My goal is to provide advice and knowledge in order to **democratize the use of causal reasoning in statistical analysis** for decision-making by providing tools to create value easily, sustainably, and fairly.

EXPERIENCE

DATA SCIENTIST CONSULTANT   2021-2022
Ekimetrics | Paris, France

- **Interpretability and Time Series**: Decomposition of marketing actions' uplifts with SHAP on predictions of time series revenues
- **Few-shot Learning in NLP**: Use of semi-supervised methods for Aspect Based Sentiment Analysis applications

DATA SCIENTIST INTERN   2020
Schlumberger | Cambridge, UK

- Performed data-driven prognostics for **Survival Analysis**
- Resulted in the deployment of the solution on more than 14 equipment

DATA SCAN TOOL ENGINEER INTERN   2019
Schlumberger | Paris, France

- Build a physical model of signal propagation in transmission lines
- Applied Machine Learning algorithms to detect and locate failures simulated through the physical transmission line model

EDUCATION

PH.D. STUDENT   2022-today
INRIA Saclay, Paris Saclay University & Ekimetrics | Gif-sur-Yvette, France

- Thesis topic: "**Causal Uncertainty Quantification under Partial Knowledge and Small Data Regimes**"
- Supervised two Master students on **Causal Data Generation** projects

MSc in Applied Mathematics for Data Science   2020-2021
CentralSupelec, Paris Saclay University | Gif-sur-Yvette, France

- Graduated with a **GPA of 4.2/4, top 5%**
- Thesis in collaboration with the Paris BNP AI Lab: "GNNs for Financial Product Recommendation"

Undergraduate engineering cycle   2017-2019
CentralSupelec, Paris Saclay University | Gif-sur-Yvette, France

- Graduated with a **GPA of 4/4, top 10%**

Preparatory classes   2015-2017
Lycée Pierre de Fermat | Toulouse, France

PUBLICATIONS

Articles   **A. Poinsot** and A. Leite (2023). "A Guide for Practical Use of ADMG Causal Data Augmentation". In: *Workshop on the pitfalls of limited data and computation for Trustworthy ML, ICLR 2023*. URL: https://openreview.net/forum?id=kBcAZcKypug.

CONFERENCES

ICLR WORKSHOP ON PITFALLS OF LIMITED DATA   May 2023
AND COMPUTATION FOR TRUSTWORTHY ML
Kigali, Rwanda

- Presented a poster

THEMATIC QUARTER ON CAUSALITY   Spring 2023
Paris & Grenoble, France

- Gave a talk, **Reconciling Mix Marketing Modeling and Causal Inference**
- Organised a challenge, **Estimating Marketing Uplifts as Heterogeneous Treatment Effects with Meta-Learners**
- Chaired some sessions
- Presented a poster

ELLIS DOCTORAL SYMPOSIUM   Sept 2022
Alicante, Spain

- Presented a poster

MACHINE LEARNING SUMMER SCHOOL (MLSS22)   June 2022
Krakow, Poland

- Presented a poster

SKILLS

Program Languages
- Professional level: Python (PyTorch, sklearn, numpy, ...)
- Intermediary level: R, Java, C++

Data Science Frameworks
Slurm, Azure Databricks, Dataiku, Google Cloud

Languages
- French (native)
- English (full professional proficiency)
- Spanish (basic)

REFEREES

Alessandro Leite
Researcher
Team TAU, INRIA Saclay
alessandro.leite@inria.fr

Marc Shoe- nauer
Research Director
Team TAU, INRIA Saclay
marc.schoenauer@inria.fr

Nicolas Ches- neau
Head of Innovaltion, Research & Devlopement
Ekimetrics
nicolas.chesneau@ekimetrics.com