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Statistics, Data Science, Artificial Intelligence,...

Shaping the Future Together

The Royal Statistical Society of Belgium has the pleasure to invite you to a

One-day Symposium on June 13th 2023 in Brussels

In collaboration with the Federal Public Service Finance, Ethias and TRAIL (Trusted AI Labs).

In today's world, tons of data are produced and are used in many data-driven technologies. Statistics serve as a foundation when dealing with data and its analysis in data science. There are certain core concepts and basic principles that need to be thoroughly understood before jumping into the use of advanced data analytical tools and algorithms of artificial intelligence systems.

These systems are becoming more common and are now often used to support human decision making, but widespread adoption of AI systems requires people to trust their output. Where machine learning algorithms and advanced data science techniques are involved in decision making, AI governance is also becoming a necessity, with the aim of closing the gap between accountability and ethics in technological progress. Practical challenges of AI further include data privacy and security issues, data quality, data storage issues and dimension reduction, and computing power.

Once again this year we have inspiring speakers from various fields:

- ✓ The research and innovation capacities of the Walloon and Brussels regions for AI development,
- ✓ The domain of insurance represented by Ethias,
- ✓ Customs and Excise & Strategic Expertise and Support from the Federal Public Service Finance,
- ✓ The Belgian statistical office Statbel,
- ✓ The tech startup 2022 Metamaze,

and many more: academics, labor market researchers,...

AUDIENCE

This one-day symposium aims to bring together practitioners from the public service and industry, academics and young PhD researchers. The symposium is not intended to provide a detailed technical focus on any particular aspect of data-driven decision-making, but does aim to a high-level overview of the different challenges in the whole process.

WHEN

Tuesday June 13th 2023

VENUE

Finance Tower complex

Pacheco-conference room

Pachécolaan 13

1000 Brussels



REGISTRATION

[Registration](#) is free but mandatory (before June 6th 2023)

PROGRAM:

- 8:30 – 9:10 Registration, coffee and sandwiches
- 9:10 – 9:20 Welcome President RSSB (Gentiane Haesbroeck, ULiège)
- 9:20 – 10:00 Dimensionality reduction, visualisation, and clustering: the unexpected statistical sides of stochastic neighbour embedding (John Lee, TRAIL – UCLouvain)
- 10:00 – 10:40 From correlation to causality: how to build a robust “feature selection” (Pierre Ars, UCLouvain and Ethias and Benjamin Belvaux, Ethias)
- 10:40 – 11:00 coffee break
- 11:00 – 11:35 Advanced analytics in tax policy: tax gap estimation and microsimulation models (Adriaan Luyten and Dierk Op ‘t Eynde, FPS Finance)
- 11:35 – 12:15 Statbel's administrative and survey data, and their use in online public policy evaluation tools: the Beamm microsimulation platform (Patrick Lusyne, Statbel and Tom Truyts, University Saint-Louis)
- 12:15 – 13:15 sandwich lunch @ Pacheco foyer
- 13:15 – 13:50 How recent advances in AI technology will drastically overhaul your business and personal life: natural language processing, chatGPT,... (Jos Polfliet, Metamaze)
- 13:50 – 14:25 Anything to declare? Data science and AI for computer vision in customs risk management (Lore Cloots and Sami Bali, FPS Finance)
- 14:25 – 14:45 From Data to Ethias practical use cases in the insurance field (Benjamin Belvaux, Ethias)
- 14:45 – 15:10 coffee break
- 15:10 – 15:30 Simulation-based inference (Arnaud Delaunoy, TRAIL - ULiège)
- 15:30 – 16:00 What can job ads tell us about the state of the data labor market in Europe? (Mike Friedman, Aqua Pharma Group and Jose Mendoza, Prophecy Labs).
- 16:00 – 16:15 From PhD to public sector (Inge Mattens, FPS Finance)
- 16:15 – 16:20 Closing (Gentiane Haesbroeck, ULiège)

Moderator: Dierk Op ‘t Eynde (FPS Finance and board member RSSB)