

THE PROBLEM ADDRESSED

Today, unleashing AI performance is hurdled by:

- Compliance (Ethics, Certification such as AI act)
- Technics (unsupervised data, high dimension,...)

ARTIST tackles all that, with a SaaS solution and enables Data Team and End Users to build trustworthy AI (ethical, robust, explainable) to:

- identify & correct biases and performance drift
- provide top notch scoring performance

Powered by TreeRank algorithm **+15y of R&D by Stéphan Clémençon** (Telecom Paris patents, more than 30 rank A publications) teaming with a start up dedicated to explainable AI.

A top level scientific team (led by Stéphan Clémençon from Telecom Paris) and engineering team (AI-vidence start up and PhD from ENS).

TECHNOLOGY

- The technology is based on the scoring method TreeRank, outperforming traditional techniques, (outcome of a long term research program in AI, by Prof. S. Clémençon, and partly with Prof. N. Vayatis (ENS Paris Saclay).
- The algorithm is coded in Python, in a streamlit framework, hosted on Telecom Paris servers.

• It may be additionally tweaked to enhance even the best performance achieved on any use case.

ARTIST

#TrusthworthyAI #ScoringMethod #Algorithm

COMPETITIVE ADVANTAGES

- A solution to correct biases even in high dimension
- Optimal scoring model, enhancing the performance of any competitor
- A user-friendly interface with appealing interpretability/explicability features
- Simple to use, is fully explainable and requires no scientific expertise.

APPLICATION

Banking

- credit risk
- fraud detection
- identification of high potential clients

Industrial production

- predictive maintenance
- quality control and counterfeit detection

Medical

- drift measurement of lab analysis
- enhanced blood report

DEVELOPMENT STATUS

• TRL 5

INTELLECTUAL PROPERTY

- IDDN.FR.001.200023.000.S.P.2024.000.10000
- Related to a family of patents entitled "Method for providing with a score an object, and decision-support system" : in Europe EP2614470 granted, in Canada CA2810941 granted, in the USA US9235805 granted.

INVENTORS & CONTACTS

- Stéphan Clemençon, full Professor at Télécom Paris, IMT, and head of the S2A (Statistics and Applications) <u>stephan.clemencon@telecom-paris.fr</u>
- TTO: <u>farid.ouriachi@telecom-paris.fr</u>

PUBLICATIONS

- A Bipartite Ranking Approach to the Two-Sample Problem. Stephan Clémençon, Myrto Limnios & Nicolas Vayatis. (2022)
- AUC maximization and the two-sample problem. Stephan Clémençon &. Depecker (Telecom ParisTech) and N. Vayatis (ENSC) (2009). In Advances in Neural Information Processing Systems 2010, Vancouver

LOOKING FOR

- Proofs of concept in customer environment
- Extension to new use cases
- Services customers