

DEEL

DEpendable & Explainable Learning





The project will provide industrial partners with the artificial intelligence (AI) tools and technological bricks that enable them to **secure and certify** in a short time the development of their critical systems integrating AI functions.

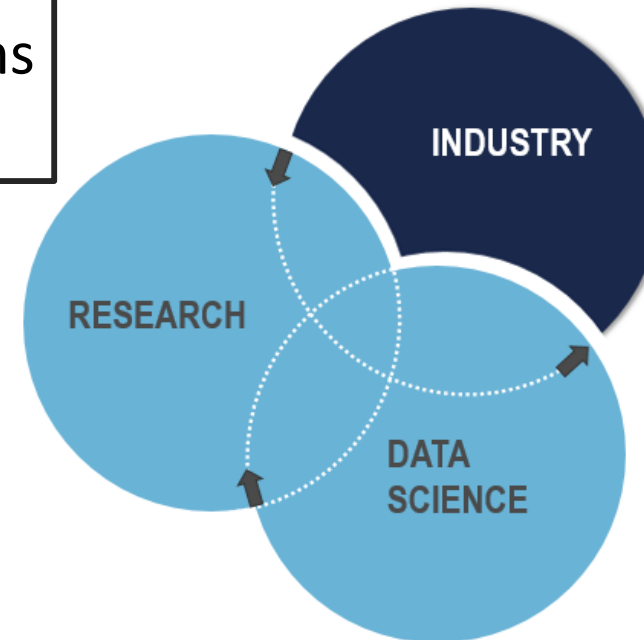
Main topics:

- Explainability,
- Robustness,
- Fairness,
- Certificability,
- Privacy

Toulouse



Montréal



26
M€

5
ans

24
partners

60



Fairness challenge objectives:

- removing bias from training (training data, unfair decisions)
- effects of the learning sample in the ML process use it to improve training datasets
- collaborative training with separate and secret datasets

M. Serrurier, Jean-Michel Loubes, et E. Pauwels, « Fairness with Wasserstein Adversarial Networks », 2019.

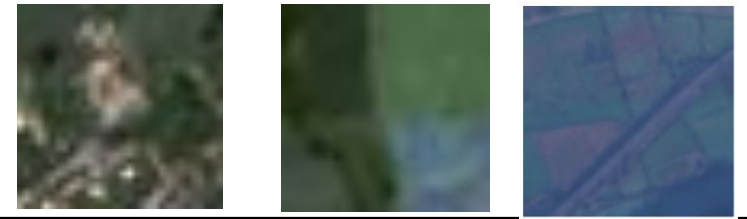
Risser, Vincenot, Couellan, Loubes, 2019 <https://arxiv.org/abs/1908.05783>

Explicability challenge objectives:

- User concepts for explainability toolbox (industrial and certification level)
- Explainability of black box models
- Stability of models and interpretability
- Metrics

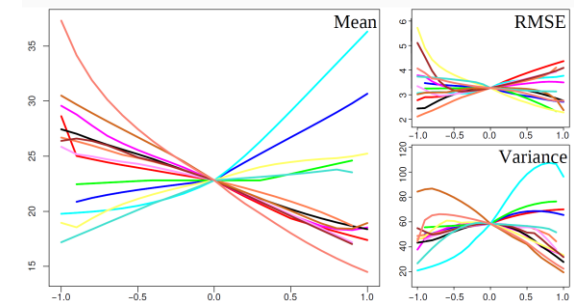
Deliverables:

- methodology, tools, metrics to measure bias
- algorithms to correct bias in models
- benchmark with industrial applications,



Deliverables:

- Methodology, tools, metrics for explanation
- Algorithms to explain black box models
- Tutorials on industrial use cases



« Certification of AI » mission presented yesterday (paper We.1.B.3)



www.mobilit.ai



THANKS!

