



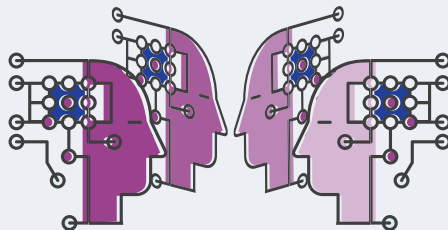
Robust & Intelligible AI


for explainable critical decisions


WWW.XTRACTIS.AI


Predictive Robots

BY AUGMENTED FUZZY ARTIFICIAL INTELLIGENCE



- 
 xtractis® explains in detail how it makes its decisions, by creating transparent knowledge-based decisional systems defined by continuous rules that are understandable by the business expert.
 > **Auditable, Traceable and Certifiable AI**

- 
 xtractis® learns alone to learn better: its robots are able to infinitely improve their induction strategies in a competitive, then in a collaborative way.
 > **Collective and Evolving AI**

- 
 xtractis® knows how to learn even with low quality or low quantity data, to offer powerful predictive models in new situations.
 > **Robust, Resilient and Frugal AI**

USE-CASES



FINANCE, INSURANCE, MARKETING
Customer Behavior (palatability, churning, emotions), Risk Analysis, Malicious Activities...



R&D, SMART INDUSTRY
Optimal Product Design, Diagnostic, Maintenance, Quality, Data Fusion...



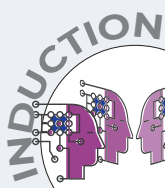
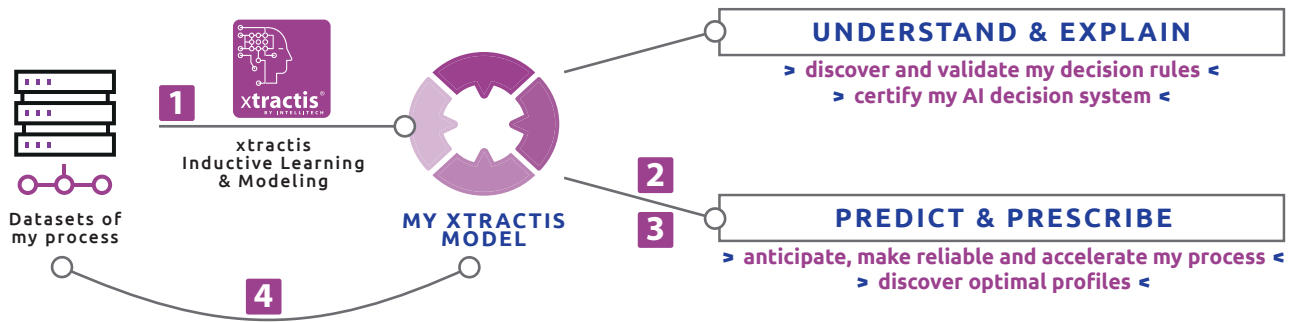
DEFENSE, SECURITY
Cybersecurity, Fraud, Crime, ADAS, Biometrics, Decision Support for Command & Control, Object Recognition...



HEALTH, BIOTECH, PHARMA
Epigenetic Personalized Medicine , Monitoring of Patients, Drug Discovery...

xtractis® Disruptive AI

AN OPERATIONAL SOLUTION WITH 4 KEY FEATURES



1 xtractis® GENERATE > INDUCTIVE LEARNING

Discovers, from your multidimensional datasets and through a collective and evolving inductive learning, robust and intelligible predictive models composed of IF...THEN non-linear fuzzy rules.



2 xtractis® PREDICT > PREDICTIONS

Uses the models to deduce predicted responses of your process, in real time and at high frequency. Unfolds the reasoning followed justifying its prediction.



3 xtractis® OPTIMIZE > PRESCRIPTIONS

Uses non-linear models (xtractis® or analytical models) to discover the optimal solutions satisfying your multi-objective request.



4 xtractis® MONITOR > AUTO-MAINTENANCE

Continuously monitors the performance of deployed models, builds the new learning sets and requires from GENERATE to regenerate the expired models.

Fully automated solution

ON-SITE OR EMBEDDED LICENSES



Types of License

TA	Temporary Annual
CDU	Temporary with Counting of the Days of Use
CR	Temporary with Counting of Requests
P	Perpetual
SS	Single Station
F	Floating
Sis	Single Session
MuS	Multi Session
Sil	Single Instance
Mul	Multi Instance
RA	Remote Access

Features

Automatic discovery of most efficient learning inductive learning to automatically build best predictive models. Calculation of the contribution of each decision rule (performance, predominance)

Automatic selection of the predictive variables, Calculation of the individual influence of each variable

Multicore CPU Massively Parallel Calculations to manage large datasets or to launch multiple robots simultaneously

Intensive analysis of the robustness of the generated models by different cross-validation techniques (LOO, MC, Validation/Testing)

Regression, Multinomial Classification or Scoring Modeling

Clustering by unsupervised learning

Visualization of the **decision rules**, visualization of the **individual influence** of the predictive variables for each prediction

Instant and simultaneous Predictions for several studied variables with several models

Real time and simultaneous Predictions at high frequency for several studied variables with several models

Definition of multi-objective requests on the studied variables and constraints on the predictive variables

Simultaneous inversion of several models, **Discovery of exact optimal solutions / prescriptions**

Dynamic exploration of the decision surface (2D/3D cross sections)

Performance monitoring of deployed models, Detection of behavioral change, Building of new learning datasets

Monitoring of GENERATE Robots for the regeneration of expired models

Detailed reports for **decision making traceability**

Query by client applications running on any type of OS (Web Service)

Features	xtractis® GENERATE	xtractis® PREDICT	xtractis® OPTIMIZE		xtractis® MONITOR		
		EMBEDDED / SERVER		SERVER			
Automatic discovery of most efficient learning inductive learning to automatically build best predictive models. Calculation of the contribution of each decision rule (performance, predominance)	✓						
Automatic selection of the predictive variables, Calculation of the individual influence of each variable	✓						
Multicore CPU Massively Parallel Calculations to manage large datasets or to launch multiple robots simultaneously	✓	✓	✓	✓	✓		
Intensive analysis of the robustness of the generated models by different cross-validation techniques (LOO, MC, Validation/Testing)	✓						
Regression, Multinomial Classification or Scoring Modeling	✓						
Clustering by unsupervised learning	✓						
Visualization of the decision rules, visualization of the individual influence of the predictive variables for each prediction	✓	✓		✓	✓		
Instant and simultaneous Predictions for several studied variables with several models	✓	✓		✓			
Real time and simultaneous Predictions at high frequency for several studied variables with several models			✓				
Definition of multi-objective requests on the studied variables and constraints on the predictive variables				✓			
Simultaneous inversion of several models, Discovery of exact optimal solutions / prescriptions				✓	✓		
Dynamic exploration of the decision surface (2D/3D cross sections)	✓	✓		✓	✓		
Performance monitoring of deployed models, Detection of behavioral change, Building of new learning datasets					✓		
Monitoring of GENERATE Robots for the regeneration of expired models					✓		
Detailed reports for decision making traceability	✓	✓		✓	✓		
Query by client applications running on any type of OS (Web Service)				✓	✓		
Type of License	TA or CDU, SS, MuS, Mul RA	TA SS or F Sis, Sil	P SS	CR SS	TA SS or F Sis, Sil	CR SS	TA, SS Sis, Sil RA
Type of application	Desktop		Em-bedded	Web service	Desktop		
Operating System	WINDOWS / WINDOWS SERVER / LINUX (Q1 2022)						

About INTELLITECH

DEEPTECH - INVENTORS OF AI SINCE 1998



OUR SERVICES

- ✓ Software Solutions (on-site / embedded)
- ✓ Creating predictive models from data
- ✓ Integrating models into business processes
- ✓ Supervision & Maintenance of models
- ✓ Support to the deployment of xtractis® solutions
- ✓ Training & Coaching in the use of the xtractis® AI

SUCCESS STORIES



FINANCE, INSURANCE, MARKETING
xtractis® succeeds in finding predictive models of credit default with a Gini of 10 points higher than statistical models of logistic regression. That means much less capital to immobilize with a better detection of the most risky files.



R&D, SMART INDUSTRY
Since 2009, xtractis® has discovered the optimal formulations of hygiene and wiping products for several major international brands, adapting them to the sensory perception of consumers in each national market.



HEALTH, BIOTECH, PHARMA
xtractis® is able to diagnose nearly 98% of breast cancers from image analysis of mammary cells, exceeding the performance of anatomical pathologists.



DEFENSE, SECURITY
xtractis® is the winner of the Tech-Challenge "Objects Detection" organized by the French General Direction of Armaments (DGA) and the French Military Intelligence (DRM) putting in competition more than 50 academics, blue chip companies, and SMEs specializing in AI and image processing.

OUR CORE BUSINESS

R&D in the Theory of Fuzzy Relations of order N and Inductive Learning, to design a robust, intelligible and explainable AI dedicated to strategic and critical processes. Edition of the xtractis® software solutions.

"INTELLITECH develops innovative solutions using continuous logic-based mathematics, core of a sovereign and unique AI, with multisector applications.

We offer our clients cutting-edge AI technology to reinforce their critical and strategic decision-making processes in the most reliable and transparent way possible"

Prof. Zyed ZALILA
FOUNDER & CEO

OUR VISION OF AI

Intelligent robots that work together, self-evaluate and learn to learn better by perfecting their inductive reasoning.



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