

PORTFOLIO · SOFTWARE BUILT END TO END

Ludovic Lucas

Senior IT architect at the junction of IT and automation. Three products designed, developed and run in production - from the architecture to the last line of code.

AI-driven trading environment

ChainTaxReport

Crapou

BattleKart · patent BE 1022274

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BATTLEKART - AUGMENTED-REALITY KARTING · 2013 - 2019

I created the concept and built the original system from scratch: the game engine, the on-board electronics and the projection system. A localization system tracks every kart in real time; the server computes the game state and drives the projectors so that the whole floor and walls become one living game, with weapons, bonuses and tracks redrawn in seconds. Co-inventor of the patent family "Environment creation system": BE 1022274 B1 (2016), US 10,967,279 B2 (2021), EP 4235628 B1 (2024), priority 8 June 2015.

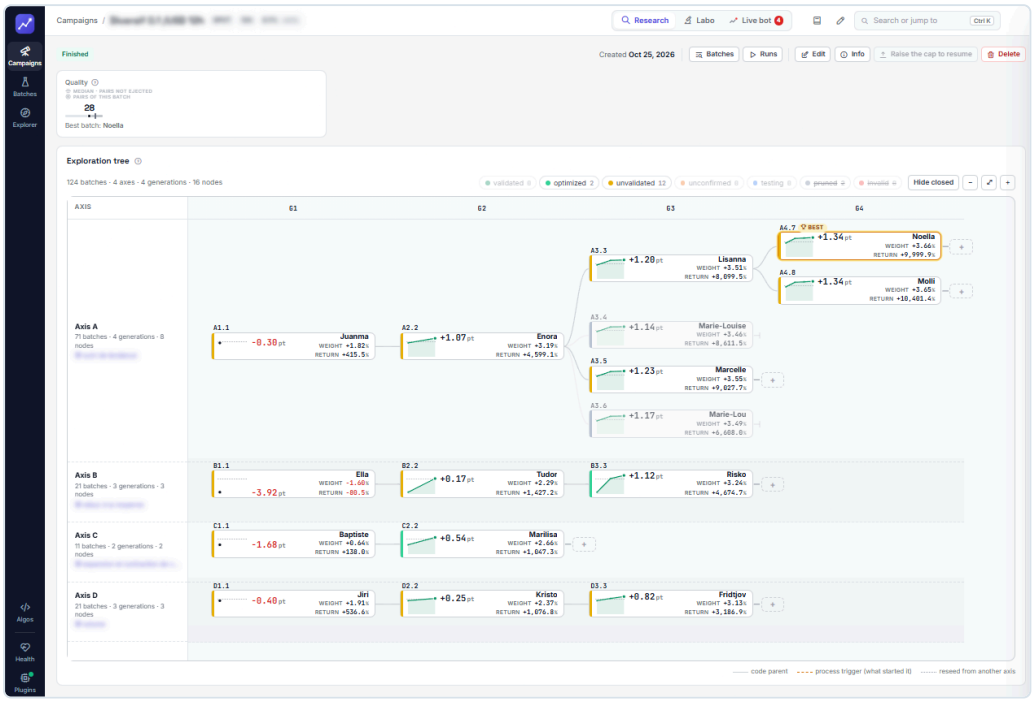
Illustration - non-contractual image.

AI-driven automated trading environment

Founder & architect · since 2023 · proprietary, used by investment funds and family offices ($10M+)

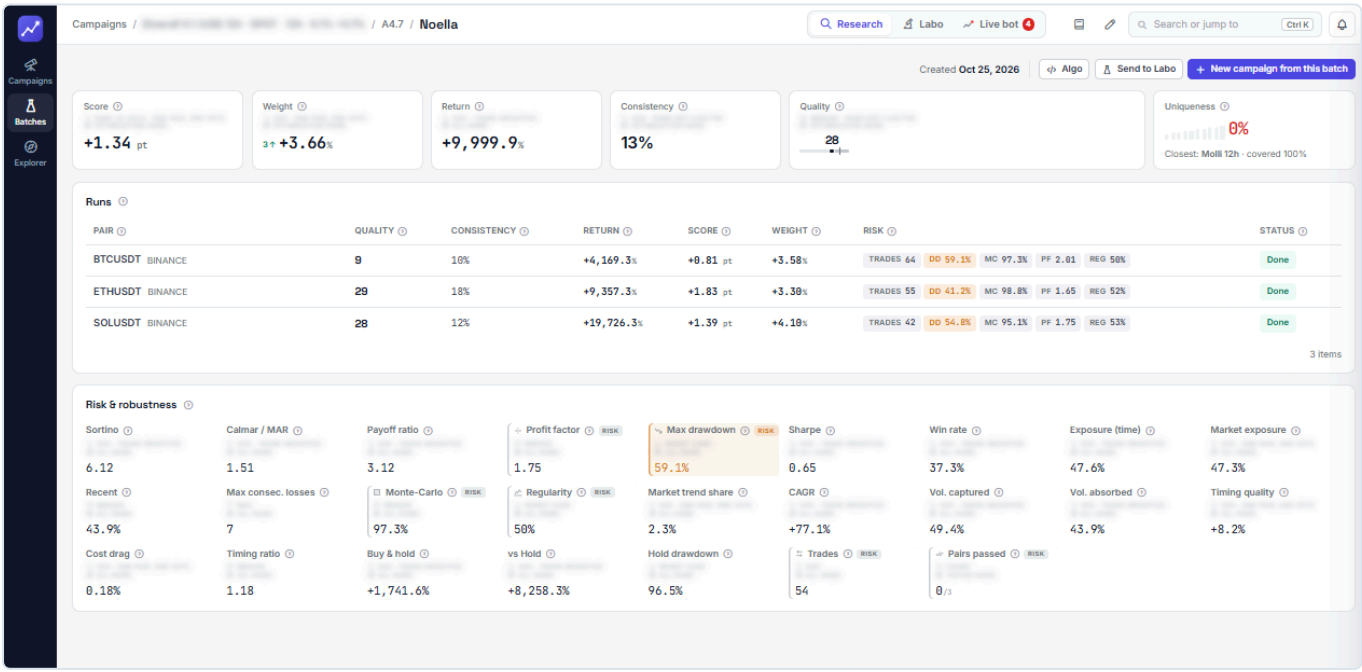
What it is. A closed-loop research platform where LLMs write, test, repair and evolve trading strategies with full lineage. A proprietary engine runs backtests at scale. Validation is institutional-grade: walk-forward out-of-sample, Monte Carlo robustness, portfolio correlation, drawdown safeguards. **Screenshots are anonymized.**

STRATEGY EXPLORATION TREE



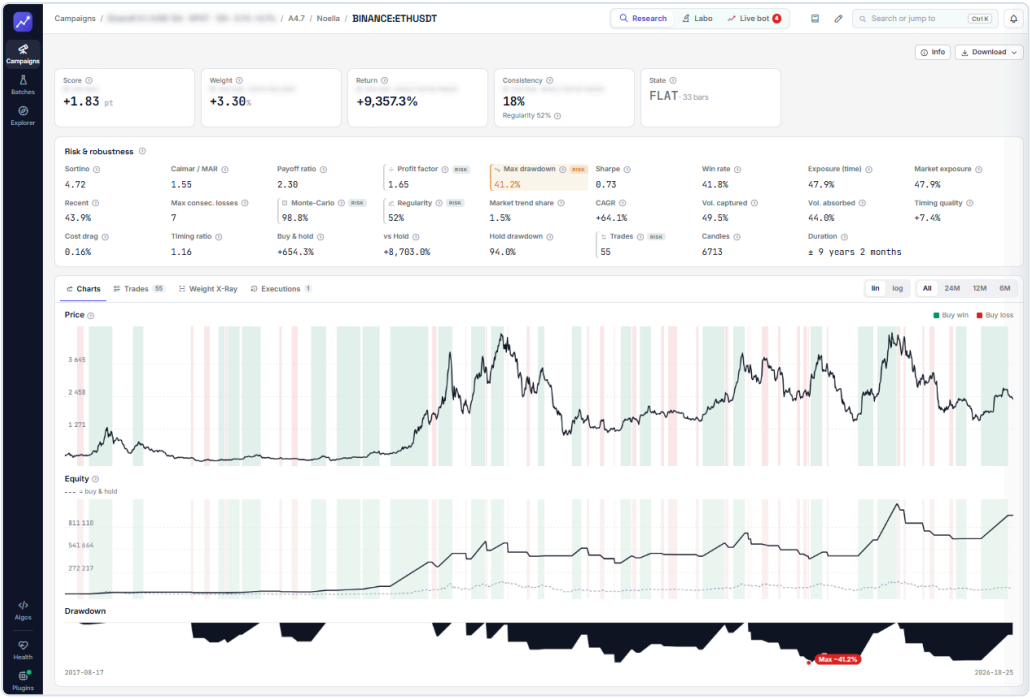
Each node is a strategy generation: the AI keeps the lineage, scores and the reasons a branch was kept or dropped.

RISK & ROBUSTNESS



Walk-forward, Monte Carlo and correlation checks before any strategy reaches a wallet.

BACKTEST CAMPAIGN

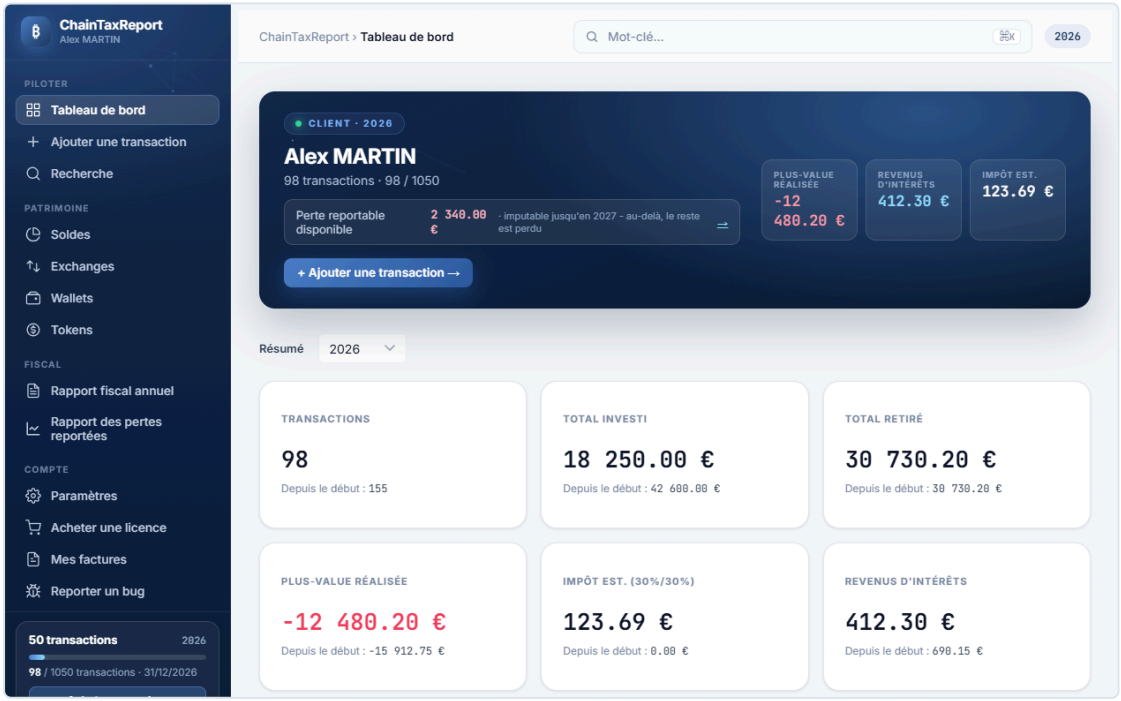


Research campaign view: equity, drawdown and benchmark comparison across hundreds of runs.

ChainTaxReport

Founder & developer · since 2025 · nayaro-corporation.com/chaintaxreport

> **What it is.** Crypto tax reporting SaaS (FIFO). Multi-year loss carry-forward, PDF reports ready for filing, country-specific guidance. PHP 8.4, Stripe with Stripe Tax, security audited. Demo account shown.



Client dashboard: portfolio, realized gains, reports.

Crapou

Founder & developer · since 2026 · crapou.com · iOS / Android / web

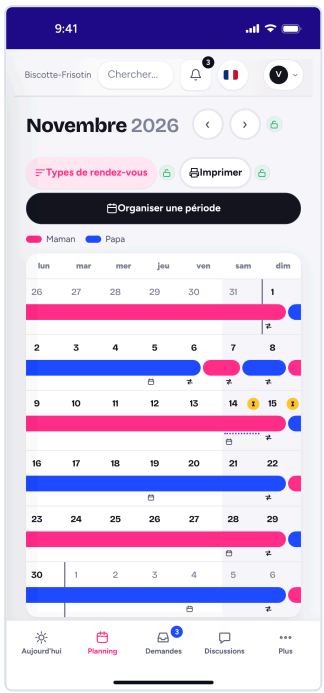
What it is. Co-parenting platform: custody schedules, handovers, approvals, shared expenses with receipts and validation. Freemium with three tiers, Stripe payments, SMS alerts.



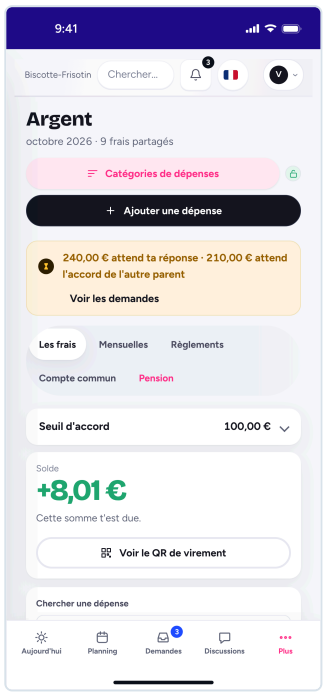
Login



Home



Custody calendar



Shared expenses

Industrial IT & invention

Patents BE 1022274 · US 10,967,279 · EP 4235628, and the missions that cannot be screenshotted

Pfizer - virtualization of the SCADA infrastructure. Designed and developed an in-house tool converting all supervision addressing from Applicom fieldbus cards to TCP/IP, with full validation and documentation. It made the virtualization of the plant's industrial infrastructure possible and was rolled out company-wide.

Nayaro Industrial IT - missions for TotalEnergies, Baxter, Alten. SCADA architecture and migration (Proficy iFIX, Siemens), custom communication interfaces and protocol-level development, virtualization with minimal production impact, Windows Server / Active Directory / SQL Server, network segmentation (VLAN, firewalls), critical incident resolution.

BattleKart - augmented-reality karting, built from scratch. Game engine, on-board electronics and projection system. Co-inventor of the "Environment creation system" patent family: BE 1022274 (2016), US 10,967,279 B2 (2021), EP 4235628 B1 (2024).



economie
SPF Economie, PME, Classes Moyennes & Energie
Office de la Propriété intellectuelle

1022274 B1

Date de délivrance : 08/03/2016

BREVET D'INVENTION

Date de priorité :

Classification internationale : G09B 9/00, G06Q 50/00

Numéro de dépôt : BE2015/5352

Date de dépôt : 08/06/2015

Titulaire :

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Belgique

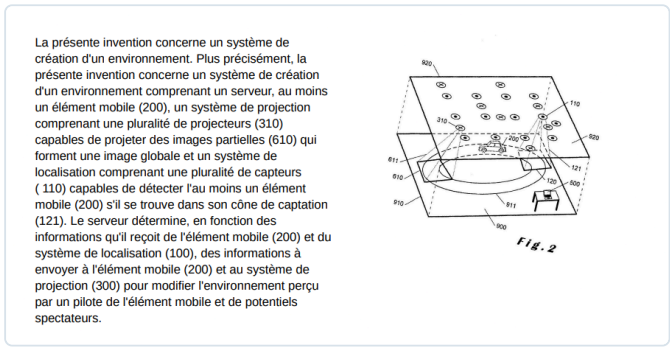
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Système de création d'un environnement

Belgian patent BE 1022274 B1 - first page (SPF Economie, Office de la Propriété intellectuelle), granted 08/03/2016.



La présente invention concerne un système de création d'un environnement. Plus précisément, la présente invention concerne un système de création d'un environnement comprenant un serveur, au moins un élément mobile (200), un système de projection comprenant une pluralité de projecteurs (310) capables de projeter des images partielles (610) qui forment une image globale et un système de localisation comprenant une pluralité de capteurs (110) capables de détecter l'au moins un élément mobile (200) s'il se trouve dans son cône de captation (121). Le serveur détermine, en fonction des informations qu'il reçoit de l'élément mobile (200) et du système de localisation (100), des informations à envoyer à l'élément mobile (200) et au système de projection (300) pour modifier l'environnement perçu par un pilote de l'élément mobile et de potentiels spectateurs.

Abstract and Fig. 2: tracking sensors (110), projectors (310) forming one global image on the track, server driving the karts (200).

STACK

C#, WPF, .NET, C, Java, PHP, JavaScript, Python, SQL - any language on demand. Proficy iFIX, Siemens WinCC / Simatic, VMware, Windows Server, Active Directory, Microsoft SQL Server, MySQL / MariaDB, OPNsense, Chrome extensions (MV3), Stripe, Anthropic / OpenAI APIs.

AVAILABILITY

Freelance, worldwide - offshore and remote sites included. Day rate from €1,200, rate card on request.