



Yann Labour

CTO & Full Stack Engineer

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LinkedIn

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www

CTO and full-stack engineer with 18 years across web platforms, DevOps, and system architecture. At CapStellar (a crypto/VASP) I lead a small engineering team and own architecture, infrastructure, security, and applied AI. I re-platformed a Node/Python monolith to Laravel microservices, shipped multi-exchange (Binance/Kraken) crypto products, and built an AI support agent that resolves about 1 in 3 tickets end-to-end. Specialist in Laravel, automation, and AI-driven operating leverage. Open to remote or relocation (Europe / UAE).

Experience

CapStellar, Flow Corporation

Chief Technology Officer (CTO)

July 2025 - Present

Virtual Asset Service Provider (VASP) - crypto portfolio automation

Remote / Mauritius

Highlights:

Re-architected the platform (V2 to V3) from a Node.js/Python monolith to a Laravel microservices architecture across multiple production environments

Shipped core product end-to-end: automated multi-exchange (Binance + Kraken) index-rebalancing engine, zero-downtime Binance-to-Kraken migration, Earn/yield, and prepaid-wallet fee settlement

Built a Claude-based AI support agent (RAG + secure tool integration) that resolves ~31% of tickets end-to-end with zero human touch, letting the support team absorb a 4x volume surge without added headcount

Designed ~75 automation workflows and established continuous delivery (CI/CD, feature flags, event sourcing), shipping 200+ production merges per month with a three-person team

Built a strategy backtesting simulator over historical market data — configurable indices, entry/exit rules and capital management, surfacing Sharpe, drawdown and trade-level analytics, with an AI natural-language strategy mode

Built the data platform and reporting pipelines powering operational and revenue dashboards for company leadership

Owned technical remediation of an external penetration test and CIS/ANSSI configuration audit; co-authored ICT operational-resilience governance under the EU DORA regulation as interim ICT security lead

Sole owner of infrastructure: a ~20-server multi-provider fleet (DigitalOcean, Hetzner, IONOS) managed via Laravel Forge plus serverless workloads on Laravel Cloud, a multi-region API with automated failover (Cloudflare Load Balancer, warm standby, MySQL read-replica routing), and a Tailscale zero-trust network

Built a single-pane-of-glass operations console monitoring the entire estate — server vitals, health checks, deploys, CI, uptime and security findings — with automated incident detection and Slack alerting

Responsibilities:

Define and execute company-wide technical vision and architecture

Own platform security, data protection, and operational resilience

Oversee infrastructure, DevOps, and cloud cost optimisation

Skills

Development

- PHP: Laravel & ecosystem (Horizon, Nova, Passport, Scout)
- Python: FastAPI
- Javascript: React, Vue.js, Node.js, jQuery, Adobe Extendscript
- Frontend: TailwindCSS, Bootstrap
- Databases: MySQL, MongoDB, PostgreSQL, SQL Server, BigQuery, Redis
- Message Queues: SQS, Beanstalk
- Building REST/gRPC APIs and single page applications
- Background jobs processing

AI & Automation

- LLM integration: Claude / Anthropic API
- Retrieval-Augmented Generation (RAG), vector search (PGVector)
- Model Context Protocol (MCP) tools
- Workflow automation: n8n
- Agent evaluation, confidence scoring, human-in-the-loop

Data Science

- Python: Pandas, NumPy, Scikit-Learn, TensorFlow
- Machine Learning fundamentals
- Data processing and analysis

Cloud & DevOps

Lead applied-AI and automation strategy across support, onboarding, billing and reporting

Hands-on development of core backend systems and automation workflows

Technologies:

Backend: Laravel, API Platform, Python, Node.js

Frontend: React

AI/Automation: Claude/LLM, RAG, MCP, n8n

Data: PostgreSQL, MongoDB, BigQuery, Redis

Infra & DevOps: Laravel Forge, Laravel Cloud, Docker, CI/CD, Cloudflare (LB/WAF/Tunnels), Tailscale, gRPC

Diadeis/SGSco

Software Engineering Manager

May 2024 - June 2025

Reporting to Software Engineering team / Global

📍 Remote

Highlights:

Rebuilt color profile system with Data Science team, creating industry-leading tool that strengthened company's market position

Developed client-facing search application integrating with Data Science team's API

Created automated file delivery solution saving US\$45K/month globally

Built Adobe Illustrator/InDesign extension for automated solutions and content injection

Implemented critical automated quality check systems at group level

Responsibilities:

Design application architecture and implementation strategy

Cross-functional collaboration with Data Science, Infrastructure, Automation & Operations

Cloud architecture planning on Azure (App Service, Containers, Functions)

Development of internal/client-facing tools and Adobe extensions

Team recruitment, training and mentorship

Technologies:

Development: Laravel, Node.js, Vue.js, Intertia.js, .NET Core, JS/Adobe Extendscript

Database: Azure SQL, MariaDB, Redis, Postgres, MongoDB

DevOps: Terraform, Azure DevOps, Github Actions

Systems: Azure App Service, Container Apps, Docker

- Multi-provider VPS fleet management: DigitalOcean, Hetzner, IONOS, AWS (Laravel Forge)
- PaaS / serverless: Laravel Cloud, Cloudflare Pages
- Azure: App Service, Container Apps, Functions, DevOps
- Multi-region high availability: Cloudflare Load Balancing, warm standby, DB read-replica routing
- Docker Containers and orchestration
- CI/CD pipelines (Github Actions, Azure DevOps), zero-downtime deploys
- Infrastructure as Code (Terraform)

Security & Domain

- Application security, penetration-test remediation (OWASP, CIS/ANSSI)
- Encryption & key management
- Digital assets / crypto (CeFi), Fintech
- VASP & regulatory transition (MiCA, DORA)

System

- Linux production fleet administration (Ubuntu, Debian)
- Web servers & runtimes: Nginx, Apache, PHP-FPM, Octane/FrankenPHP
- Zero-trust networking: Tailscale mesh VPN, Cloudflare Access, Tunnels, WAF
- Monitoring & observability: fleet health checks, heartbeats, uptime/cron monitoring, incident alerting
- Microservices architecture

Development Team Lead

May 2021 - April 2024

Reporting to Data Science team / North America

📍 Remote

Development Team Lead

June 2019 - April 2021

Reporting to Operations / Mauritius site

📍 Mauritius

🇫🇷 Languages

- English: Fluent
- French: Native
- Spanish: Basic

❤ Interests

Co-founder and Lead Developer

September 2015 - May 2019

📍 Mauritius

Highlights:

- Led year-long project for governmental health agency, securing renewal for second year
- Partnered with Barclays Incubator startup to develop CX field proof-of-concept
- Client-facing role for pitches, proposals and estimates

Responsibilities:

- Development of web applications for government, health sector and startups
- Creation of technical specs and user stories from requirements
- Management of remote development teams

Technologies:

Laravel, Vue.js, MySQL, Git, Docker, Ubuntu

- Web applications & Software automation
- Cooking: Mediterranean and Asian cuisine
- Reading: Science fiction, fantasy

Education

Data Science BootCamp (Bac +3/4 equivalent) ²⁰²³

Le Wagon

Project: Deep Dive: Marine debris detection using transfer learning with VGG19. Classified underwater images into 17 pollution categories with 60% accuracy.

Repository: https://github.com/yayann/deep_dive

Master (Bac+5/MSc) Computer Science

2009

Université de la Réunion

Speciality: Information and Communication Sciences and Technologies