# Fabien Tanguy – Systems Expertise Overview

## Purpose of this document

This document complements my CV.
It does not restate roles or timelines, but provides context on how I approach large-scale web systems, how I make technical decisions under real constraints, and how I have contributed to the performance, reliability and evolution of enterprise platforms.

It is intended for technical decision-makers, senior engineers, architects, and clients seeking clarity on system-level thinking rather than interface execution.

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## How I approach large-scale web systems

I work primarily at the intersection of architecture, performance and business constraints.

My focus is not on feature delivery in isolation, but on how systems behave under load, evolve over time, and remain operable in regulated or high-risk environments. I pay particular attention to:

- Architectural trade-offs rather than “best practices in theory”
- Performance as an outcome of system design, not late optimization
- Progressive modernization instead of disruptive rewrites
- Alignment between frontend behavior, backend rules and data integrity

This approach is strongly influenced by my early background in revenue optimization, where decisions were always evaluated against measurable impact, constraints and long-term sustainability.

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## Selected enterprise cases

### FDJ United – High-traffic regulated gaming platform

**Context**
FDJ operates one of the largest regulated online gaming platforms in France, with strong legal constraints, extreme traffic peaks and zero tolerance for instability during draw and betting windows.

**Key challenges**

- Migration from a legacy Symfony-based frontend to a modern Next.js architecture

- Maintaining performance under very high concurrency
- Preserving regulatory compliance, traceability and tracking accuracy
- Avoiding regressions during progressive rollout

**My contributions**

- Acted as technical referent within the squad, contributing to architectural decisions alongside the tech lead
- Designed and implemented a progressive migration strategy to Next.js (v12 to v14), avoiding a big-bang rewrite
- Focused heavily on rendering performance and perceived speed:
    - First Contentful Paint (FCP)
    - Largest Contentful Paint (LCP)
      Time to Interactive (TTI)

- Introduced caching strategies aligned with both business constraints and infrastructure limitations

- Built a client-side personalization engine supporting both generic and personalized user journeys without duplication

- Designed an internal tracking library in collaboration with analytics teams, improving reliability while reducing implementation overhead for developers

**Impact**

- Measurable improvements in loading performance on critical journeys
- Safer deployment cycles during high-risk periods
  Cleaner separation between business rules, rendering logic and analytics concerns
- Reduced long-term maintenance cost for both feature and tracking layers

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## Accor Group – Data-centric employee platforms

**Context**
Accor operates thousands of hotels worldwide, with highly structured operational processes, shared workstations and complex user lifecycles (roles, permissions, locations, brands).

**Key challenges**

- Multilingual environment (15 languages)
- Strong coupling between frontend behavior and backend business rules
- Performance constraints on shared, low-powered devices
- Complex user and hotel lifecycle management

**My contributions**

- Led frontend development for a large internal employee portal used across hotels
- Designed key functional modules:
    - Application launcher
    - Incident and alert management
    - Custom KPI dashboards
    - User configuration flows
- Implemented secure Single Sign-On flows adapted to shared workstation environments
- Worked closely with backend teams to refactor parts of the data layer
- Contributed to the redesign of stored procedures and backend models to:
    - Reduce API response times
    - Improve data consistency
    - Better reflect hotel, user and operational lifecycles

**Impact**

- Improved responsiveness of critical APIs through data-layer optimization
- Clearer alignment between frontend flows and backend domain models
- More robust handling of user state, permissions and contextual data
- Better long-term maintainability of business logic embedded in data models

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## AXA / Solera – Data integrity and offline-first constraints

Across insurance platforms (AXA life insurance journeys and Solera/Sidexa claims management), my work focused on reliability under constrained conditions:

- Complex regulatory rules encoded into user flows
- Strong need for traceability and auditability
- Offline-first usage for field experts
- Dynamic form generation driven by backend data

I contributed to:

- Designing frontend logic tightly aligned with backend validation rules
- Building dynamic form engines driven entirely by API-delivered schemas
- Implementing offline-capable workflows for real-world field usage
- Ensuring that frontend flexibility never compromised data integrity

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## Data-aware engineering mindset

My early career in yield management shaped my approach to engineering.

Before writing production code, I was already working with:

- KPIs
- revenue impact
- optimization under constraints
- trade-offs between short-term gains and long-term stability

Today, this translates into systems that:

- respect relational data models
- expose clear boundaries between calculation, display and persistence
- support analytics, auditing and regulatory review
- avoid “frontend-only” logic that drifts away from business reality

This is why I naturally gravitate toward SQL-based systems and explicit data modeling, even when working primarily on web platforms.

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## Leadership and ways of working

I regularly act as a technical reference without formal authority.

My role typically includes:

- Clarifying technical trade-offs for product and non-technical stakeholders
- Helping teams converge toward shared standards
- Preventing accidental complexity in evolving systems
- Ensuring long-term ownership rather than short-term delivery

I value environments where technical decisions are discussed openly and where system reliability is treated as a product feature, not an afterthought.

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## Where to see more

Selected technical projects and long-form articles are available on my GitHub profile.

## EDUCATION, CREDENTIALS & SIDE PROJECTS

### Certifications (Active & Recent):

- Oracle Database SQL Certified Associate (1Z0-071) (2025)
- Oracle APEX Developer Certified Professional (2025)
- Oracle Cloud / Autonomous Database Foundations (2025)
- IBM SkillsBuild – Cybersecurity Fundamentals (2025)
- Professional Certificate in Web Programming Conservatoire National des Arts & Métiers (2008–2010)

### Education:

- **CNAM Paris:** Professional Certificate in Web Programming Conservatoire National des Arts & Métiers • Paris, France • 2010.
- **International School Tunon:** DECP in Tourism & Hospitality Management • Paris, France • 2010.
- **Lycée Jules Ferry:** BTS in Electronics • Versailles, France • 2010..

### Featured Side Project:

- **Chrono Journey:** A modular, open-source platform for interactive timelines.
- **Stack:** Nx Monorepo, NestJS, Next.js, PostgreSQL. Demonstrates expertise in modern industrialization and full-stack architecture.

on ajoute là la v1 de vesselcore qu'on a fait avec apex ?