

# Stéphane ERARD

Pragmatic Full-Stack Web Architect — 20+ years building production systems

Nice, France · Full-Time Remote · French (native), English (fluent)  
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Mojos: *anything-as-code* · *you better make it a module*

## PROFILE

Self-taught developer who went from a BTS apprenticeship to designing Roslyn-based meta-metamodels and multi-stage source generation pipelines. No engineering degree — curiosity and 20 years of building production systems bridged every gap.

**Pragmatic first.** Zero frameworks when vanilla does the job. No abstraction until there's a proven need. Every company I worked at had its delivery time reduced by orders of magnitude — iterative, short feedback loops, constant course correction.

**Quality as craft.** TDD, mutation testing (Stryker  $\geq 0.95$ ), 100% coverage — not as metrics to satisfy, but as **design pressure**. Hand-written fakes, no mocking frameworks. If the build passes, the product works.

Seeking a full-stack web position with a path to tech lead — ready to drive architecture, mentor developers, and own delivery end-to-end.

## PROFESSIONAL EXPERIENCE

### Schneider Electric (*via STEP UP*) — Software Engineer

Aug 2025 – Dec 2025 | Full-Time On-Site | SAFe

EcoStruxure Automation Platform — industrial IDE for IEC 61499-based automation authoring and runtime.

Automated Dev Workstation	Fully scripted, git-managed Windows bootstrap (PowerShell + winget) — onboarding from days to hours
Build & DevX Optimization	Improved compilation performance, caching, incremental paths — reducing inner-loop feedback time
IEC 61499 IDE Features	New editor features for function block graphs, deployment workflows, type safety, versioning
SAFe Delivery	Sprint planning, PI planning, demos as part of a multidisciplinary Agile Release Train

PowerShell winget Git IEC 61499 C# Unit Testing

### BIM&CO — Senior Software Developer

2020 – 2025 | Full-Time Remote | Team of 6, Agile

BIM data company (Trace Group), SAAS B2B products around quality-data.

Refactored Core Feature	V4 (XML) → V5 (JSON): indexing from 2 days → 20 minutes (async/await, SemaphoreSlim)
Revived Unit Tests	From non-working to running — semi-integrated testing connecting Domains & Infra
New MVP Product	Big-data project with low-latency expectations, complete DX experience front & back
Built PfDev	Developer tooling extracting "how-to" knowledge into scripts — setup from 5 days → hours
Extracted Core Feature	Distributed queue, workers, saga pattern — making it scalable
Reworked Zip Feature	Distributed workers to handle big zip workloads at scale

C# .NET 6–9 ASP.NET Web API Workers Messaging OpenAPI PowerShell Azure AWS

### FrenchExDev — Independent R&D

2017 – 2020 | Personal Projects

Built the foundation of the FrenchExDev .NET ecosystem during a career break — Result pattern, Builder, BinaryWrapper framework, first typed CLI wrappers (Docker, Podman), PowerShell module library. This period shaped the design-time engineering and source generation approach used in all later projects.

C# .NET Core Roslyn PowerShell Docker Podman Packer Vagrant

## Qwant — Senior Software Developer

2015 – 2017 | Full-Time On-Site

French meta search engine. **Work audited for 75M€ company valuation** (Caisse des Dépôts entry into capital).

Scalable Software Factory	5-stage pipeline (Dev, CI, QA, CDel, CDep) — from no CI to full automated delivery
SDLC, ALM & PLM	Pattern integration into products
Coordinated QA Developers	Coding E2E tests with Selenium
Developer Tooling	Scripted PC setup and working instances — onboarding from days to hours
Screen Controller	Jenkins monitoring displayed to teams

Bash GitLab Jenkins Packer Vagrant Docker Selenium NodeJS

## CrossKnowledge — Full-Stack Web Developer

2013 – 2015 | Full-Time On-Site | Team of 6 + QA, Agile

Leading E-Learning SAAS (B2B). **Company sold for \$175M to Wiley & Son.**

MOHIVE E-Learning	Authoring tool (Flex), runtimes (Flash, HTML5), server (C#, SQL Server)
Reduced Time-To-Delivery	From 5 days → 1 hour — pipeline automation
Built CI/CD Tooling	Dev & CI task automation

C# ASP.NET WS SOAP TypeScript Flex Flash jQuery Unit Testing

## AUSY — Full-Stack Web Developer

2010 – 2013 | Full-Time On-Site | Sophia-Antipolis

Doctissimo ( <i>10 months</i> )	Refactored BE.COM (LESS, jQuery) — lot sold for ~18M€. High availability, high volume
INERIS ( <i>5 months</i> )	G2B application in application of Law. Dedicated <b>state-machine framework</b> bindable to Doctrine
e-Tourism ( <i>8 months</i> )	Tourism booking platform with historical pathways and monuments

PHP Symfony Doctrine MySQL Selenium jQuery

## Freelance — Software Developer

2011 – 2012 | Remote

Appointment Management	Web app for retailers and dentists (Symfony, Doctrine, Diem CMF)
Asbestos Diagnosis	Building design with annotation and photo positioning

## Diem Project — Software Developer Volunteer (OSS)

2010 – 2011 | Open Source

Content Management Framework on Symfony & Doctrine. **Took succession of founder** for the 5.1 branch. Core contributions including Doctrine **Nested Tree** plugin with front component.

PHP Symfony jQuery

## Tequila Rapido — Software Developer

2009 – 2010 | Full-Time On-Site

Web agency. **POC of next-generation CMS** for a CAC40 player (Symfony, Doctrine, Apostrophe). Finished implementation & release of **RenaultRent.com**.

PHP Symfony Doctrine MySQL jQuery

## AB Croisière — Software Developer

2007 – 2008 | Full-Time On-Site

Cruising offers company — **sold to Promovacances-Karavel**. Redesigned tariff & availability systems (SOAP, SQL, BackOffice). Managed IT farm of 50 clients.

PHP MySQL jQuery

## TECHNICAL SKILLS

### .NET Ecosystem

- **C# 13**, .NET 10, ASP.NET Core, Web API, Workers, SignalR, Blazor, Entity Framework Core
- **Roslyn Source Generation**: incremental generators, semantic analysis, Extract→Emit pattern
- **Patterns**: DDD (attribute-based), CQRS, Result, Builder, FSM, Meta-metamodeling (M3), interface segregation
- **Quality**: TDD, Stryker  $\geq 0.95$ , hand-written fakes, QualityGate (Roslyn static analysis: complexity, coupling, cohesion)

### DevOps & Infrastructure

- **CI/CD**: GitLab CI/CD, Jenkins, 5-stage pipelines, quality gates in YAML
- **Containers**: Docker, Compose, Podman — all wrapped via typed C# APIs
- **VM & Images**: Packer, Vagrant, VirtualBox — typed wrappers with event hierarchies
- **Scripting**: PowerShell 7+ (30+ modules), Bash, design-time pipelines
- **Cloud**: Azure, AWS, on-prem GitLab CE, Traefik, Alpine Linux

### Frontend & Other

- TypeScript, Node.js, vanilla ES6+, HTML5, CSS3, responsive design
- PHP, Symfony, Doctrine (legacy stack, 6 years production)
- AI-assisted development: Claude Code (daily driver), multi-LLM integration

## FRENCHXDEV ECOSYSTEM

Personal .NET & PowerShell monorepo — 32+ projects, 500+ tests, 30+ PowerShell modules.

Highlight	What it proves
<b>BinaryWrapper</b> — 7 CLI wrappers (Docker, Podman, Vagrant, Packer, GitLab CLI...), 300+ versions scraped, 700+ generated files	End-to-end Roslyn source generation at scale
<b>Dsl</b> — M3 meta-metamodel with 5 primitives, powering 3 downstream DSLs (DDD, Requirements, Diem)	Language design and compiler-adjacent thinking
<b>Diem</b> — Content Management Framework, 62 sub-projects across 4 DSLs, Blazor generation, SignalR, OpenTelemetry	Full-stack framework architecture
<b>QualityGate</b> — Roslyn-based static analysis (complexity, coupling, cohesion), 256 tests, 100% coverage	Quality engineering as code
<b>Result + Builder</b> — composable Result monad and source-generated async builders used across all projects	Foundation library design
30+ PowerShell modules — DevOps, containers, VMs, infrastructure, AI, .NET build automation	Tooling-first developer experience

## EDUCATION & PROFILE

Year	Diploma
2007	Niveau BTS Informatique de Gestion (2-year apprenticeship, exam not taken)
2004	BAC STI (Sciences et Technologies Industrielles)

**Self-taught** — from PHP CMF contributor (2010) to .NET meta-metamodeling (2026). **Bilingual** — French native, English fluent. **Remote-native** — productive and autonomous. **Agile** — SAFe, Scrum, iterative delivery.