



CONTACT

📍 Aix-en-Provence,
Provence-Alpes-Côte
d'Azur

🔗 www.escemi.com

LINKS

- LinkedIn
- GitHub
- Malt

Emilien Escalle

On-Demand CTO & DevX Expert

I combine technical coaching, DevX excellence, and cloud-native modernization to transform product quality and velocity while keeping teams autonomous and accountable.

SKILLS

Core Tech

Node.js (NestJS) •••••

PHP (Symfony, Laravel)

•••••

TypeScript / JavaScript

•••••

Clean Architecture ·

SOLID · TDD

DevOps & Cloud

Docker · Kubernetes ·
AWS

GitHub Actions · GitLab
CI

Terraform · ArgoCD ·
IaC

Observability ·
OpenTelemetry

Methods & Leadership

Technical coaching ·
DevX

Clean Code · Design
Systems

Mentoring 15+ teams

Lean · Agile · Product
velocity

LANGUAGES

- ▶  French - Native

- ▶  English -
Professional working
proficiency



PROFESSIONAL EXPERIENCE

Fractional CTO & DevX Expert

Build & Run - Fractional CTO / DevX Expert

Feb 2020 - Present · Remote · France

Challenge: Scale-ups lacked senior technical leadership to align squads and speed up releases.

Actions: Authored cloud-native reference architectures, reusable GitHub/GitLab CI/CD stacks, DevX playbooks, and mentored 25+ engineers on Clean Architecture and TDD. **Results:** +35% velocity, -40% technical debt, 5x release frequency, and onboarding time reduced from 4 weeks to 1 week.

- ▶ Challenge: multi-squad delivery slowed by heterogeneous stacks and manual releases
- ▶ Actions: Kubernetes/Terraform blueprints, reusable CI/CD templates, DevX scorecards, and coaching rituals
- ▶ Results: **+ 35%** velocity, **- 40%** debt, 5x releases, onboarding cut to 1 week



EDUCATION

2007 - 2010

Master 2 - MIAGE (Computer Methods Applied to Business Management)

- ▶ Université Aix-Marseille III
Paul Cézanne

2005 - 2007

DUT - GEA (Business and Administration Management)

- ▶ IUT GEA Gap



CERTIFICATIONS

2024

LFC102: Inclusive Open Source Community Orientation

- ▶ The Linux Foundation

On-Demand CTO & Senior Lead Developer

ESCEMI - Strategic Technical Partner

Jan 2009 - Present • Aix-en-Provence, France

Challenge: SMEs and scale-ups needed industrialized software delivery without hiring a permanent CTO.
Actions: Designed SOLID architectures, delivered API platforms (REST/GraphQL/gRPC), built CI/CD + observability stacks tailored to each client, and coached teams hands-on.
Results: 90% automated quality gates, >100K requests/day with <100ms latency, deployment time reduced from hours to <30 minutes, and infrastructure spend cut by 30-40%.

- ▶ Challenge: ambitious product roadmaps with under-structured tech teams
- ▶ Actions: SOLID-centric frameworks, API platforms, CI/CD automation, and cloud-native migrations
- ▶ Results: **90%** automated checks, <30min deployments, € **80 - 150K** /year savings, 10x traffic readiness

Technical Director & IS Architect

Qwamplify Group - Technical Director & IS Architect

Sep 2013 - Aug 2018 • Rousset, France

Challenge: Consolidate 8 business units, modernize legacy PHP stack, and sustain rapid campaign delivery.
Actions: Ran 3-year IT master plan, introduced SOA/microservices, standardized dev environments, and launched CI/CD with automated QA for a 25-person org.
Results: Maintenance costs -€200K/year, release cycle from 4 weeks to 1 week, production defects -55%, and sprint reliability up to 85%.

- ▶ Challenge: fragmented legacy stack blocking digital transformation
- ▶ Actions: SOA blueprint, Big Data observability, CI/CD automation, and cross-squad governance
- ▶ Results: € **200K** /year savings, release cycle ÷4, defects **- 55%**, sprint predictability **85%**

Chief Technical Officer

Oquistiti - Co-founder & CTO

Sep 2018 - Sep 2019 • Aix-en-Provence, France

Challenge: Launch a travel inspiration platform with zero technical debt and aggressive growth targets.

Actions: Built JAMStack/serverless app on AWS, delivered MVP in 3 months, and piloted growth experiments blending SEA, CRM, and analytics.

Results: 5K active users in 6 months, <500ms load time, 40% engagement lift, and 300+ weekly sign-ups at €2.50 CPA.

- ▶ Challenge: deliver a compelling MVP in under 3 months
- ▶ Actions: JAMStack/serverless architecture, rapid UX loops, data-driven acquisition
- ▶ Results: **5K** MAU, **40%** higher engagement, € **2 .50** CPA, **99.8%** uptime



KEY PROJECTS

Air Corsica - DevX Platform Engineering

Air Corsica

Jan 2023 - Dec 2024

Modernized developer experience and transactional security for airline booking platform through GitHub Actions CI/CD ecosystem, hands-on mentoring, and resilient NestJS/RabbitMQ proxy architecture.

- ▶ Reduced deployment time by **80%** (from ~2 days manual work to <30 minutes fully automated) via reusable GitHub Actions workflows with canary deployments and automated rollbacks
- ▶ Increased release frequency 5x (from monthly to weekly feature releases) through infrastructure-as-code (Terraform + ArgoCD) ensuring staging/production parity
- ▶ Improved transaction reliability to **99.9%** uptime with **90%** fewer third-party failures by architecting NestJS proxy with RabbitMQ, implementing circuit breakers, retry policies, and idempotency guarantees
- ▶ Cut new developer onboarding time by **70%** (from multiple days to <1 day productivity) through standardized workflows, living style guides, and automated dependency updates
- ▶ Mentored distributed team (in-house + contractors) on Clean Architecture and SOLID principles via weekly workshops, elevating code quality and establishing unit-test coverage thresholds
- ▶ Deployed resilient microservice in Docker with OpenTelemetry monitoring, Datadog integration, and zero-downtime health checks for critical booking/payment flows

Critical Infrastructure IoT Gateway Platform

Global Smart Infrastructure SaaS Provider

Jan 2023 - Aug 2024

High-performance IoT gateway for global smart infrastructure SaaS provider, unifying heterogeneous device integration across data centers and smart buildings with Redis-backed resilience, automated CI/CD, and OpenTelemetry observability.

- ▶ Achieved **99.99%** production uptime by implementing Redis caching, edge queueing, and automatic retry strategies with exponential backoff
- ▶ Reduced data loss incidents by **85%** through resilient fallback mechanisms that buffer messages during SaaS platform outages
- ▶ Accelerated new device onboarding by **81%** (from **3 weeks to 4 days**) via centralized decoders, schema-based validation, and normalized payload pipeline
- ▶ Scaled to handle 10× traffic increase (**100K** + events/minute per gateway) without additional hardware through worker pools and optimized in-memory caching
- ▶ Cut deployment cycle time by **70%** with GitLab CI automation integrating unit, integration, and E2E tests plus canary releases and staged rollouts
- ▶ Built unified REST API with OpenAPI specification for device lifecycle management, enabling remote registration, updates, and real-time monitoring
- ▶ Integrated OpenTelemetry for full observability with logs, metrics, and alerting tied to device health and data flow KPIs

TestUnMetier - CTO Accompaniment

TestUnMetier

Nov 2021 - May 2022

Two-phase strategic consulting engagement for a career guidance platform: comprehensive IT audit followed by monthly CTO accompaniment covering product roadmap, technical recruitment, and infrastructure/security vendor management.

- ▶ Conducted 1-week IT audit analyzing application architecture, development processes, and team organization, identifying 12 priority improvement areas that reduced technical risk by **60%**
- ▶ Structured interviews with 8 stakeholders (product, project, tech leads) to map system dependencies and bottlenecks, reducing feature delivery timelines by **~ 40%**
- ▶ Developed 5 technical job descriptions aligned with product strategy, accelerating recruitment process from **3 months to 6 weeks** and improving candidate-role fit by **45%**
- ▶ Defined 12-month technical roadmap prioritizing **15+** initiatives by business impact and feasibility, aligning tech investments with growth objectives (**+ 30%** target user increase)
- ▶ Managed relationships with 3 external vendors (cloud infrastructure, security assurance), negotiating SLAs guaranteeing **99.5%** uptime and reducing infrastructure costs by **~ 25%**
- ▶ Established technical governance framework (monthly committees, velocity KPIs, quality dashboards) improving team visibility and reducing time-to-market by **35%**

Tekkare - Technical Mentoring & Architectural Bootstrap

Tekkare

Apr 2022 - Jun 2022

Hands-on mentorship of development team for technical services management platform, accelerating their skill growth in GraphQL/modern backend API architecture and optimizing development practices.

- ▶ Reduced new feature development time by **40%** through optimized GraphQL architecture with NestJS, replacing multiple REST endpoints with unified, type-safe queries
- ▶ Accelerated new developer onboarding from ~2 weeks to ~5 days via living architectural documentation, reusable patterns, and annotated code examples
- ▶ Improved code maintainability by **50%** by implementing Clean Architecture and SOLID principles with clear layer separation (domain, application, infrastructure)
- ▶ Optimized database query performance by **60%** (from ~800ms to ~300ms average) through Postgres ORM optimization, strategic indexing, and N+1 query resolution
- ▶ Established quality pipeline with automated testing (unit, integration, E2E) reducing production regressions by **70%** and increasing deployment confidence
- ▶ Mentored team on GraphQL best practices (dataloaders, pagination, error handling) and NestJS patterns via pair programming and structured code reviews

Atlas des Régions Naturelles (ARN) - Backend Architecture

Atlas des Régions Naturelles

Jun 2022 - Dec 2023

Designed and developed backend architecture for the ARN photographic archive platform, documenting 15,000+ images of French landscapes and buildings through an optimized NestJS/Laravel stack focused on performance and scalability.

- ▶ Architected photo archive platform managing 15, **000+** high-resolution images with multi-criteria filtering (region, typology, materials, period), ensuring <300ms response time and **99.9%** uptime
- ▶ Implemented hybrid categorization system with full-text indexing handling 10, **000+** daily search queries with geographic, thematic, and historical navigation
- ▶ Optimized image processing pipeline reducing upload and thumbnail generation time by **60%** (from ~5min to ~2min per batch of 50 images) through parallelization and smart compression
- ▶ Designed unified REST/GraphQL API with distributed caching cutting server load by **70%** and enabling integration with physical exhibitions and printed publications
- ▶ Deployed cloud-native infrastructure with geographically distributed CDN reducing bandwidth costs by **40%** while improving international load times by **55%**
- ▶ Established CI/CD pipeline with automated testing ensuring metadata quality (geolocation, regional taxonomy) and reducing cataloging errors by **80%**

Tekoway / Eukles - Architecture Standardization

Tekoway / Eukles

Jan 2020 - Jan 2023

3-year strategic technical mentorship across European development teams, standardizing architecture and boosting delivery efficiency for PHP/Symfony and Node.js/NestJS projects before and after Tekoway's integration into Eukles.

- ▶ Reduced project bootstrap time by **45%** (from ~10 to ~5.5 days) through shared architecture blueprints applying Clean Architecture and SOLID principles across Symfony and NestJS stacks
- ▶ Accelerated developer onboarding ×2 faster (from ~3 weeks to 1.5 weeks) via unified project templates, automated setup scripts, and common tooling across European locations
- ▶ Cut post-release bug rate by **30%** after implementing standardized QA workflows and cross-country DevOps pipelines using Docker, GitLab CI, and ArgoCD
- ▶ Improved developer satisfaction by **35%** on internal surveys regarding architecture clarity and tooling through architecture clinics, workshops, and documentation
- ▶ Mentored distributed teams remotely across multiple European countries, establishing shared technical language and unified engineering culture that scaled seamlessly through Tekoway's evolution into Eukles
- ▶ Built multi-stack project boilerplates integrating DDD folder structures, dependency injection, logging, monitoring, and observability hooks for consistent delivery quality regardless of team location

twbs-helper-module

Open Source Community

Laminas (formerly Zend Framework) module that streamlines Twitter Bootstrap component integration.

- ▶ **21+** GitHub stars and **20+** forks adopted by enterprise portals and design systems
 - ▶ Ships reusable helpers for grids, forms, navigation, and responsive layouts to accelerate delivery
 - ▶ Maintains comprehensive docs, CI pipelines, and semantic versioning to guarantee backward compatibility
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php-css-lint

Open Source Community

CLI and Composer package that enforces CSS quality gates directly from PHP projects.

- ▶ 11 GitHub stars and active usage inside custom CI pipelines for multi-brand marketing platforms
 - ▶ Wraps MDN and W3C specifications to surface actionable errors for large design systems
 - ▶ Provides zero-dependency binaries and GitHub Pages docs for quick onboarding
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ubuntu-config

Personal Tooling

Infrastructure-as-code flavored bootstrap that standardizes my developer workstations on Ubuntu.

- ▶ Automates installation of Docker, Node.js, PHP toolchains, and desktop essentials via scripted tasks
- ▶ Documents repeatable steps so consulting engagements start with a consistent developer environment
- ▶ Modular Make targets and shell scripts make it easy to extend the setup per client needs



VOLUNTEER WORK

Co-organizer & Speaker

Cloud Native Aix-Marseille

Oct 2022 - Present

Promoting cloud-native technologies in the Aix-Marseille region in collaboration with the CNCF community.

- ▶ Co-organized **8+** Cloud Native meetups and events attracting **300+** professionals, growing community from 50 to **400+** members in 2 years
- ▶ Delivered 6 technical talks on Kubernetes, GitOps, and DevOps practices, receiving 4.5★ average rating from attendees
- ▶ Facilitated knowledge exchange between **15+** companies in the region, fostering collaboration and best practice sharing

Professional instructor

Aix-Marseille Université

Jan 2019 - Present

Teaching software architectures and web development best practices.

- ▶ Taught software architecture course to **60+** Master's students annually, covering practical applications of Clean Architecture, SOLID, and design patterns
- ▶ Developed hands-on curriculum with **10+** real-world case studies, achieving **90%** student satisfaction rating and **85%** pass rate
- ▶ Mentored **15+** students on thesis projects implementing modern architectures, with **80%** securing developer positions within 3 months of graduation