

Fady Massoud

Engineering Manager (Hands-On) · Engineering Lead · Software Architect

FinTech & Payments Platforms · .NET · Azure · AWS · Microservices · Distributed Systems

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Authorized to work in the USA · Green Card

SUMMARY

Engineering leader with **18+ years** scaling FinTech payments platforms on .NET, Azure, and AWS. Currently leading a **12-engineer team** through the **zero-downtime AWS migration** of a mission-critical .NET payments platform, with full **PCI DSS** compliance and a 25% performance lift. Previously architected **20+ event-driven .NET Core microservices** at Paysafe (DDD, CQRS, Kafka) serving millions of global users — delivered **+40% release velocity**, **+25% platform performance**, **-30% vulnerabilities**. Established on-call rotation, code-review standards, blameless post-mortems, and PCI DSS audit-pass discipline across multiple cycles.

CORE COMPETENCIES

Leadership & Org	Agile delivery, roadmap ownership & OKRs, stakeholder alignment, cross-functional team leadership (Product, DevOps, Compliance, Risk, Design), mentoring & coaching, performance reviews & calibration, hiring & interview loops, 1:1 cadence, on-call program design, tech-debt budgeting, headcount planning, code-review standards, design-doc review practice.
Architecture & Development	C#, .NET Core, ASP.NET, REST APIs / Web API (OpenAPI / Swagger), WCF, MVC, Microservices, Event-Driven, Event Sourcing, DDD, CQRS, Kafka, Serverless, idempotency keys, circuit breaker / retry / backoff, rate limiting, SOLID, design patterns, secure SDLC, Angular, React, TypeScript, JavaScript.
Cloud & DevOps	AWS — EC2, RDS, DynamoDB, SQS, S3, CloudWatch, IAM, KMS. Azure — Azure VMs, Event Grid. Azure DevOps, Docker, CI/CD pipelines (TFS, Bamboo, Harness), feature flags, blue-green & canary deployments. (Additional exposure: Spring Cloud, IBM Cloud.)
Database & Performance	MS SQL Server (query optimization & performance tuning), MongoDB, MySQL, Oracle, DynamoDB.
Reliability & Observability	SLOs / SLIs / error budgets, structured logging, blameless post-mortems.
Security & Compliance	PCI DSS (multi-cycle audit readiness), OWASP, Veracode (SAST), DAST, TLS encryption, zero-trust principles, secure coding practices, audit remediation.
AI-Augmented Engineering	AI pair-programming (Cursor) and prompt-engineering for backend scaffolding; rolled out Cursor, Claude, ChatGPT, Gemini into team workflow with usage guidelines.
Tools	Visual Studio, VS Code, Git, Jira, Bitbucket, Confluence, SonarQube.

Engineering Manager (Hands-On) · Lead Software Engineer

Mar 2025 – Present

Kort Payments (acquired by Paysafe) · FinTech / Payments · Remote

- Lead the **zero-downtime AWS migration** of a mission-critical .NET payments platform on AWS (EC2, RDS, SQS, CloudWatch, IAM), achieving full **PCI DSS** compliance on the first audit cycle post-migration.
- **Manage and grow a 12-engineer team** across 2 sub-teams; authored 3 promotion cases, ran quarterly performance calibrations, and built the hiring loop that scaled the team from 8 to 12 engineers.
- **Refactored core payment-processing services** — introduced idempotency keys, retry-with-backoff, and circuit-breaker patterns — cutting payment-processing latency by **25%** and eliminating 3 classes of duplicate-charge failures.
- **Modernized the CI/CD pipeline**: feature flags, blue-green deploys; raised deployment frequency from weekly to daily and cut median PR-to-prod time from 3 days to 6 hours.
- **Owned the engineering roadmap** across 5 quarters, partnering with Product to ship 6 customer-facing features and 4 platform investments while holding tech-debt budget at 20% of capacity.
- **Established secure SDLC** — SAST/DAST in CI, PR-level code-review SLAs (median TTR < 24h) — reducing production security findings by 45%.
- **Introduced on-call rotation, runbooks, and blameless post-mortems** for 8 services; cut MTTA from 25 to 10 minutes; published 8 post-mortems with action-item follow-through.
- **Rolled out AI-augmented engineering workflows** across the team (Cursor, Claude, ChatGPT, Gemini); recovered an estimated 40 engineering hours/sprint.

Lead Software Engineer · Solution Architect

Jun 2019 – Feb 2025

Paysafe Group · FinTech / Payments · Remote

- **Architected and delivered enterprise-scale FinTech payments platforms** serving 5M+ users across 15 markets, handling 2,500 TPS at peak with 99.95% availability.
- **Decomposed a 1.5M-LOC .NET Framework monolith** into 20+ .NET Core microservices on **Azure (Azure VMs, Event Grid)** using DDD bounded contexts and event sourcing.
- **Designed and rolled out the CI/CD platform** (Azure DevOps) with automated canary deploys — raised release velocity **+40%** team-wide.
- **Embedded security into the SDLC**: SAST (Veracode), OWASP Top-10 for all PRs, TLS 1.2+, secret rotation — reduced high-severity findings by 45% across 20+ services.
- **Authored API and platform standards** — OpenAPI 3.0 contracts, versioning, idempotency-key conventions, rate-limit + error envelope — and built reusable .NET templates + Roslyn analyzers; CI-enforced across 20+ services and 8 teams.
- **Mentored 10+ engineers**, authored 6 promotion cases (Senior→Staff, Mid→Senior), and ran the weekly cross-team architecture forum — established the design-doc review practice adopted org-wide.
- **Owned PCI DSS audit readiness** across 20+ services: drove remediation of 40 high-severity findings, contributed to clean PCI passes across 5 consecutive cycles.
- **Partnered with Compliance and Risk** to design platform-wide hardening: cryptographic upgrades, dependency-vulnerability sweeps, secret-rotation automation.

Senior Software Engineer

Jul 2017 – Jun 2019

Paysafe Group · FinTech / Payments · Irvine, CA

- **Designed Kafka producer/consumer services** for payment-domain event flows — processed 150,000 events/min with sub-second latency; modernized legacy WCF endpoints to REST.
 - **Led TSYS and Fiserv processor recertifications** and onboarded 3 new banking partners — strong card-network and acquirer-integration credibility.
 - **Cut high-severity Veracode findings by 30%** across 15 services via dependency upgrades, input-validation hardening, and secure-coding training.
 - **Delivered 2FA and platform-wide security enhancements**, strengthening PCI DSS compliance.
 - **Automated CI/CD pipelines** and build infrastructure, improving release velocity and deployment consistency.
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Senior Software Engineer

Jun 2014 – Jun 2017

CraneMorley · E-Learning · Long Beach, CA

- **Modernized legacy CMS, LMS, and Microsoft Dynamics platforms** — refactored ASP, VB, and DotNetNuke applications for scalability; cut median report-generation time by 85% via SQL Server query and indexing rewrites.
 - **Led development of client-specific SPAs, certification engines, and reporting integrations** with the Cornerstone SCORM API; directed data migration and multi-portal infrastructure.
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Earlier Experience

Senior Software Engineer (Part-Time), The Dependable Companies — Logistics (LA, 2016) · Software Engineer, Upwork (CA, 2012–2014) · IT/Junior Software Engineer, Credit Agricole Bank — Banking (Cairo, 2009–2011) · .NET Software Engineer, Travel Solutions Egypt (Cairo, 2008–2009).

EDUCATION & CERTIFICATIONS

B.Sc. Computer Science · Helwan University, Cairo

Certifications: Microsoft Certified — Azure Fundamentals · OpenHack — App Modernization with NoSQL

In Progress: AWS Certified Solutions Architect – Associate

SELECTED PROJECTS, TALKS & WRITING

- Migrating a .NET Payments Platform to AWS with Zero Downtime — *article, 2026*
- Decomposing a 1.5M-LOC Monolith Without Stopping the World — *article, 2026*
- What "Hands-On Engineering Manager" Actually Means — *article, 2026*
- Idempotency Keys in Payment Systems — Five Mistakes I've Watched Get Shipped — *article, 2026*