Oliver Sanchez - .NET Senior Software Engineer / System Architect

Seasoned software engineer with 12+ years designing distributed systems, microservices, and high-throughput APIs at scale. Extensive experience in .NET Core, C#, Azure, SQL Server, Event-driven architectures, and performance optimization.

Technical Skills

C#, .NET Core, ASP.NET, Microservices, Azure, SQL Server, Event Sourcing, Kafka, Redis, Docker, Kubernetes, gRPC, CI/CD

Professional Experience

Principal Software Engineer — FinTech Solutions Inc. (2019 - Present)

New York, USA

 Led architecture and development of a high-availability payments microservices platform handling 10k TPS using .NET

Core, gRPC and Kafka.

- Designed event sourcing model and implemented CQRS for auditability and scalability.
- Migrated monolithic billing system to microservices reducing latency by 70% and improving developer velocity.

Senior Software Engineer — Global Bank Systems (2015 - 2019)

London, UK

- Built secure middleware integrating third-party payment gateways, maintained PCI-DSS compliance.
- Optimized SQL Server queries and designed partitioning strategies to handle 2TB database sizes.

Selected Projects

Realtime Fraud Detection: Built a streaming fraud detection pipeline using Kafka Streams, in-memory features with Redis and model scoring via ML microservice.

Global Reconciliation Engine: Designed scalable reconciliation engine using event-driven architecture and distributed consensus for idempotency.

Publications

Sanchez, O. 'Event Sourcing Patterns for Financial Systems', Financial Systems Conf. 2021

Certifications

Microsoft Certified: Azure Solutions Architect, TOGAF Foundation

Education

- M.S. Computer Science, University of Manchester (2012)
- B.Tech Computer Science, IIT Bombay (2010)

Technical Appendix / Contributions

Contributed to open-source projects, wrote internal RFCs on system design, created automated testing frameworks, optimized critical database queries, benchmarked model serving endpoints, implemented custom operators for CUDA, designed asynchronous task dispatching and backpressure handling, and established CI gating for security checks.

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