Igor Cova

About me

Hi! I'm a backend Software Engineer with 10+ years of experience specializing in building high-load fault-tolerant systems.

I have hands-on experience with multiple programming languages and technologies including C#, .NET, JavaScript, Go, SQL and NoSQL databases.

I'm also proficient in DevOps and cloud technologies like Kubernetes and Docker.

My core stack: C#, .NET Core, JavaScript, Go, Microservice Architecture

Deep expertise in:

- API development and optimization
- Event-driven system design
- Payment systems and banking protocols integration
- Database development and optimization
- CI/CD and DevOps practices
- Microservices architecture design and implementation
- Complex business process implementation using SAGA patterns

I value clean code, unit testing and well-thought architecture in my work. I strike a balance between performance and development velocity. I actively use design patterns, SOLID principles and AI-powered coding assistants in my workflow.

Experience

Tech Lead / Senior Software Engineer

Sravni.ru • August 2022 - Present

Project: Bank Deposits Platform

Completely redesigned the full-deal system architecture, migrating it from PHP to .NET, which improved stability and scalability.

Key Achievements:

- Designed the end-to-end deal process
- Migrated data from MongoDB to PostgreSQL
- Implemented SAGA patterns (Kafka choreography for deposit auto-renewal)
- Bank integrations
- Kafka implementation for event-driven architecture
- Monitoring setup: Prometheus, Jaeger, Kibana
- Load testing with k6
- Reliable hybrid cache manager with Circuit Breaker

Project: CASCO (Auto Insurance)

Developed end-to-end insurance service from scratch:

- Integration with insurance companies
- Data processing optimization
- Error monitoring system implementation

Tech Stack:

- C# .NET Core microservices
- PostgreSQL and ClickHouse databases
- RabbitMQ and Kafka message brokers
- XUnit for unit testing
- Entity Framework
- Redis for in-memory caching
- ArgoCD for Kubernetes CI/CD
- Grafana monitoring and alerting
- Prometheus metrics
- OpenSearch/Kibana logging
- Jaeger request tracing

Senior Software Engineer

VK (VKontakte) • June 2020 - August 2022

Project: loyalty.rkeeper.ru

Developed reporting system based on r-keeper and DeliveryClub data. Built microservices for data collection, processing, enrichment, aggregation and reporting.

Key Achievements:

- Led development of integration test framework for web services
- Led development of notification microservices using SAGA choreography

Tech Stack:

- C# .NET Core microservices
- MS SQL Server, PostgreSQL and ClickHouse databases
- RabbitMQ message broker
- GraphQL APIs
- NUnit and XUnit for unit testing
- Entity Framework
- Redis for in-memory caching
- TeamCity and Octopus for CI/CD
- Rancher for Kubernetes cluster management
- Grafana with Graylog for data visualization and monitoring

Lead Developer

Latoken • June 2019 - April 2020

Project: Crypto Integration

Developed web services for cryptocurrency exchange. Integrated various blockchains like ETH and BTC into exchange infrastructure.

Key Achievements:

- Spearheaded development of unified platform for blockchain integration (ETH, BTC etc.), reducing integration time by 10x while minimizing codebase and errors.

Tech Stack:

- C# .NET Core and Node.JS (TypeScript) microservices
- PostgreSQL and ClickHouse databases
- Kafka message broker
- gRPC APIs
- TeamCity CI/CD
- Rancher for Kubernetes management
- ELK Stack with Grafana for data visualization

Lead Developer

RFI BANK • February 2017 - June 2019

Project: Payment Processing

Developed and maintained payment processing center. Managed projects using MasterCard and Mir payment systems.

Key Achievements:

- Developed OpenAPI for banking processing integration
- Configured GitLab CI/CD for K8s with health/liveness checks
- Created Docker images for .NET Core APIs

Tech Stack:

- C# .NET Core microservices
- C-based payment processing
- Kafka message broker
- GitLab CI/CD and TeamCity
- Oracle PL/SQL and PostgreSQL databases

Software Developer

Major-Auto • June 2013 - January 2017

Project: Major-Auto CRM

Developed internal corporate information system. Started as intern, grew to mid-level developer.

SQL Server & T-SQL Development:

- Created and optimized stored procedures, triggers and functions
- Database design (tables, views, keys, indexes) and normalization
- Query execution plan analysis and optimization
- SQL Server CLR integration, CLR objects implementation

C# and WCF Development:

- Developed WCF service for internal system with external API integration
- Extended functionality by adding new classes and methods

Delphi and MS SQL Development:

- Maintained and enhanced corporate information system
- Developed business modules and user forms
- Created database objects for data management

Bachelor's Degree in Computer Science
Tomsk State University of Control Systems and Radioelectronics