

PERSONAL INFORMATION

Name: **Senad Crljenković**

Address: Jezernice 5C
79260 Sanski Most
Bosnia and Herzegovina

Mobile phone: +387 61 742 527

E-mail: senadc@codeart.ba
Personal website: www.codeart.ba



SUMMARY

Dedicated software engineer with 20+ years of experience on different projects and positions in fields of programming, specification, design and architecture and technical leadership.

Specialties: Microsoft .NET platform, Software Architecture, Object Oriented Analysis and Design, Architectural Patterns, OO Design Patterns.

Worked on coding and designing new functionalities, on setting up the architecture, as a technical lead, code reviewer, etc.

CORE SKILLS AND COMPETENCES

PROGRAMMING LANGUAGES AND TECHNOLOGIES

C# (primary), Python, Java, C++, **SQL**

.NET Framework/Core, **Entity Framework**, **NHibernate**, Web services, **WCF**, **REST**, **Socket** programming, Web and software **security**, expertise in **Oauth2** framework/standard, **OOP**, **Architectural and Design Patterns**, **AWS/Azure**, **Machine learning**

Databases: **SQL Server**, Oracle, MySQL, **MongoDB**, Redis, Versioning systems: **Git**, Subversion, IDEs: **Visual Studio**, **Visual Studio Code**, **PyCharm**, NetBeans, Web servers: **IIS**, Apache, Defects tracking tools: **Jira**, Bugzilla, Testing: nUnit, Visual Studio test framework, Software Development Methodologies: **Agile** (Scrum), UML: MS Visio, **Sparx Enterprise Architect**, Operating Systems: **Windows**, Linux, FreeBSD/OpenBSD, MacOS

WORK EXPERIENCE

Symphony d.o.o. Sarajevo	2024-current	Senior software engineer
Endava d.o.o. Sarajevo	2020-2024	Development Lead – Consultant
Comtrade d.o.o. Sarajevo	2010-2020	Senior software engineer Responsibilities: programming (with accent on back-end and service side), design and architecture of multitiered/distributed systems, technical leadership, code

Hermes Softlab	2005-2010	reviewing, mentorship software developer - lead engineer - architect
Sanatech d.o.o. Sanski Most	2003-2004	software developer, network administrator
Kalem d.o.o.	2000-2002	software developer

RECENT PROJECTS

SENIOR SOFTWARE ENGINEER IN A PROJECT FOR A FINTECH SERVICES COMPANY (2025-2026)

A fintech software company that provides banks and credit unions with risk management, treasury, financial planning, and balance sheet analytics platforms to help manage liquidity, profitability, and regulatory compliance.

Role: Senior Software Engineer – Designed and implemented backend architecture and core platform services from the ground up, driving system design discussions and technical decisions while developing infrastructure and workflows for financial forecasting and machine learning model training pipelines, alongside hands-on backend development, code reviews, documentation, and architectural diagrams.

Technical Skills and Tools: Dotnet, C#, AzureML, Azure Cloud, Hexagonal and VSA architectures.

SENIOR BACKEND ENGINEER IN A PROJECT FOR A HEALTHCARE SERVICES COMPANY (2024-2025)

A healthcare technology and services company that helps insurers and healthcare providers reduce billing errors, manage payment integrity, and improve collaboration through AI-enabled financial and claims management solutions.

Role: Senior Software Engineer - Contributed to the development and architectural discussions of core platform services, including security-sensitive authentication and authorization flows, participated in the design and evolution of an event sourcing SDK, and worked on backend development, code reviews, and day-to-day engineering tasks across the system.

Technical Skills and Tools: DotNet/C#, EventSourcing architecture, VSA architecture, AWS, DynamoDB, MongoDB, SQL Server

BACKEND DEVELOPER IN A PROJECT FOR A LARGE CRYPTO CURRENCY EXCHANGE (2021-2022)

A large crypto exchange, operating worldwide with backend in Python. Creation of a module for user-friendly purchase of crypto currencies.

Role: Senior Software Developer - Writing API for simple buy module. Writing module for background processing and flagging suspicious/fraudulent transactions. Code review.

Technical Skills and Tools: Python, Django framework, MySQL/Amazon Aurora DB

BACKEND DEVELOPER IN A CATEGORIZATION ENGINE FOR FINANCIAL TRANSACTIONS (2021)

Service for automatic categorization of banking transactions into predefined categories, using machine learning algorithms.

Role: Senior Developer. Work on the modules for persistence, manual RE-categorization by the user, modules for validation and comparison of efficiency of different algorithms over non-anonymized transactions, and validation of ML model learning performance on new and unknown data.

Technical Skills and Tools: Python, SQL Alchemy, Falcon REST API, XGBoost, Neural Networks, Pandas, Waitress, Gunicorn

VIRTUAL BANK OFFICE PROJECT FOR A LARGE REGIONAL BANK (2018-2020)

Online bank account opening, video identification, taking a bank loan and other customer services without physically coming to the bank.

Role: Developer and architect of the main integration middleware for different API vendors (video identification, digital signing, ID document OCR, document storage, obtaining information about the client from state registers and many more). **The bank won the award for the best European banking product innovation for this product.**

Technical Skills and Tools: .NET Core, C#, Visual Studio, C#, SQL Server, Entity Framework, REST API

DESIGNER AND DEVELOPER OF A MODULE FOR VIBER BANKING (2016-2017)

An application that enables the use of electronic banking through the Viber messaging platform.

Role: Designer and developer of the Virtual PIN authentication service / Image based authentication

Technical Skills and Tools: .NET, Visual Studio, C#, REST API, Entity Framework

DESIGNER AND DEVELOPER FOR PSD2 MODULE FOR DIGITAL BANKING (2018-2020)

PSD2 directive implementation in banking software/API.

Role: Design and development of security components

Technical Skills and Tools: .NET, Visual Studio, C#, REST API, SQL Server, PSD2 standard, OAuth

OTHER NOTABLE PROJECT I'VE WORKED ON:

OAuth authorization server - made as generic and customizable, for use in various products within the Fintech division. Server side support for all important OAuth grants. Design, development, and maintenance (.NET, C#, NHibernate, OAuth2 standard)

Fraud Detection system for e-Banking - detecting fraud in financial transactions (payments/logins), allowing users to define their own rules in a language similar to natural, or to rely on machine learning algorithms. Role: Development, participation in design and making architectural decisions (C#, Oracle, Code Effects, WCF, Machine learning)

E-Wallet - Main integration developer, working on specification and implementation of custom TCP protocol for communication with legacy Unix systems, including development of multithreaded TCP server and clients (C#, Entity Framework, MongoDB, Web API, raw network/socket programming, Quartz)

Telecom Mobile Diag - software for automated diagnostics of mobile devices/smartphones
- includes iOS/Android/Windows Phone app, plus main „remote control“ / management desktop application (Visual Studio, C#, Entity Framework, network/socket programming)

Re-insurance - part of the system for an insurance company, worked as developer/designer.
(.NET, C#, SQL Server)

Developer and technical lead **on large distributed information system for the entire business of a big Adriatic sea port** (.NET, C#, SQL Server, Remoting, NHibernate)

EDUCATION AND TRAINING

Qualifications: **FIT** - Faculty of information technologies Mostar (VI degree)

High school – electronics technician

Trainings: Situational leadership (Biro Praxis Ljubljana), Project management, (Hermes SoftLab Sarajevo), OO Design Patterns (Hermes SoftLab, Sarajevo - instructor), Visual Studio Team System Boot Camp, Microsoft Croatia, Varaždin

[Software Architecture & Technology of Large-Scale Systems](#), Udemy

[Machine Learning](#), Stanford University, Coursera

[Software Security](#), University of Maryland, College Park, Coursera

[Forensic Accounting and Fraud Examination](#), West Virginia University, Coursera

[Data Science Math Skills](#), Duke University, Coursera

[The Git and GitHub bootcamp](#), Udemy

[Get Started with .NET Core Identity Server](#), Udemy

Languages: **Bosnian:** Native, **English:** Intermediate