

# ANTON LYHIN – SENIOR SOFTWARE ENGINEER 14 DEC 2024

## Personal Data

Web: <https://lyhin.com>  
Phone: +375 (29) 379 88 25  
Email: [dotnet@lyhin.com](mailto:dotnet@lyhin.com)  
Telegram: @anton\_lyhin

## Summary

.NET developer with 13 years of enterprise expertise in software engineering. Contributed production engineering experience to worldwide brand products, Fortune 1000 companies, financial applications.

- **.NET C#** practice since 2009, *Microsoft Certified*; several years of .NET development for Linux;
- **Databases:** SQL Server, *Microsoft Certified*; NoSQL: MongoDB; ETL with Azure DataFactory;
- **JavaScript:** 5 years. Angular 2-16, plain JavaScript, TypeScript;
- **Sitecore:** *Sitecore 9 Certified*, 2 years practice. Tools: Sitecore 7-9, Unicorn, Glass Mapper, Experience Analytics, Pipelines, Sitecore Rocks, Sitecore PowerShell, Habitat/Helix.

## Areas of strength include

- A year of work experience as a lead developer with English speaking customer;
- Strong knowledge in .NET, REST architecture via ASP.NET Core;
- Solution Architecture: solution design complete life-cycle;
- English communication level: IELTS B2;
- Design Principles: understand SOLID, CQRS via MediatR: behaviors, requests, notifications;
- Have experience of work in Agile Scrum/Kanban teams with code reviews, daily standups, daily communication, retrospectives, able to understand and improve the defined workflow;
- Pay attention to code quality, code performance, along with unit, integration testing;

## Additional notes

- WebSockets: experience of work with SignalR;
- DataExport: Excel; Logging: Serilog.File Sinks, Audit.NET;
- Async Processing: experience in async processing via Hangfire;
- CI/CD: pipeline setup in TeamCity over Windows;
- Security: have experience in Identity;

## Education

Education Establishment: Belarusian State University  
Graduation Year: 2012  
Faculty: Applied Mathematics and Computer Science  
Department: Mathematical Modelling and Data Analysis  
Academic Specialty: Mathematical Programmer  
Academic Degree: Bachelor

## Certificates

Sitecore® 9.0 Certified Platform Associate Developer	Passed	2019-2020
Microsoft Exam 70-483: Programming in C#	Passed	2016-2018
English level: <a href="#">IELTS</a>	<a href="#">B2</a>	2015-2017
EPAM Systems Assessment	Senior Software Engineer	2016
Microsoft Exam 70-461: Querying MSSQL Server	Passed	2014-2016

[Sitecore User Group Belarus #13:](#) Sitecore Experience Analytics talk  
Hampton by Hilton Minsk City Centre

[Online Conference](#)

## WORK EXPERIENCE

*Senior SE*

Mar 2024 – Dec 2024 (10 months)

Nov 2022 – Sept 2023 (11 months)

### [Invento Labs](#)

Industry: Data Processing

Project: A tool for schema and data migration from different DB types to Greenplum database

Team: 1 Lead SE, 1 PM, 2 BE SEs, 2 FE SEs, 3 QAs, 1 BA

Tasks:

- Setting up Quant.DPM and Quant.RDM solutions structure with dockerfiles to run over Linux;
- Keycloak create Realm, configure Clients for DPM and RDM solutions, add basic permissions;
- CQRS via MediatR setup, ETL DB Schema BE integration, Airflow REST integration;
- Receiving of meta-information on table and table fields from datasource;
- Force recreate for deployed DDL implementation; Data export to Excel file;
- Audit log customization with hiding secrets;
- Epic, import files with data: FE multiform configs, permissions, statuses, file-ETL database schema integration; 1 month estimation, completed in time;
- Excel data export;

Tools: .NET 6, Angular 14, Hangfire, Apache Airflow, Keycloak, Docker.  
PostgreSQL, Oracle, MySQL, MSSQL, Greenplum.

*Senior SE*

Oct 2023 – Feb 2024 (5 months)

### [Invento Labs](#)

Industry: Workforce management, AI based

Project: A cloud-based workforce management and reskilling software

Team: 1 Lead SE, 1 PM, 8 fullstack SEs, 4 QAs, 1 BA

Tasks:

- Redesigned email notification pages to support multilingual template settings;
- Resume character stripping via attributes (required knowledge of Asp.NET pipelines);
- Bugfix: closed over 90 tickets, Work with ARIA (Accessibility, Axe DevTools);

Tools: .NET 3.1-6, Angular 10, MongoDB, xUnit.

*Senior SE (role: Lead SE), Remote Work*

Sept 2021 – Aug 2022 (12 months)

### [Exadel](#)

Industry: Budgeting, Forecasting

Project: Migration of existing Axiom Excel client to Web client

Team: 1 Lead SE, 1 PM, 3 SEs, 3 QAs, 1 BA

Tasks:

- As a team: migrated 20 Command Center pages of Axiom Excel client to Web client;
- Implemented Data Sync service for range of tabs, did SOLID refactoring;
- Enabled role security protection, integrated reusable FE components across Command Center pages;
- Crossteam work: Syntellis, Exadel, Bhavna at first stage; then as Exadel only external team;
- Held sprint demos, did code reviews and task delegation;
- Decoupled/migrated DAL from PricingEngine to FI solution to enable computation API.

Tools: .NET Framework 4.8; SQL Server; TFS.

Industry: Finance, Dating  
Project: Microservice Financial application on Linux containers  
Team: 1 PM, 4 SEs, 2 AEs, 1 DevOps on demand  
Tasks:

- MongoDB schema and data-fix script for production with over 1 million records affected;
- An asynchronous, customizable Audit module implementation with algorithm of json comparison and message publishing to Logstash, Audit integration to a range of services;
- Migration of microservice application from .NET Core 2.0 to .NET Core 3.1, 10 services involved;
- Troubleshooted reason of test Automation failures coming from NGINX infrastructure;
- IdentityServer Client handling and Client password management: Angular UX implementation;
- MS Excel report generation module; ChinaPay payment misconfiguration investigation;
- 3DS V2 payment and refund implementation and testing: Ingenico, Argus payment systems;
- Argus SOLID refactoring to enable 3DS V2;
- Fix for RiskScore failure for Amount filters 3 services involved;
- Fix for invalid Rebill Token issue 4 services involved, database schema and data are affected.

Tools: .NET Core 3.1; ASP.NET Core; Docker on Linux, K8S; RabbitMQ, ELK, IdentityServer; TeamCity, Octopus; Jira, Bitbucket; SQL Server, MongoDB; IDE: Visual Studio 2019, R#, Pluralsight, Studio 3T, Total Commander.

Industry: Franchising  
Project: Microsoft Azure microservice application with CQRS, Event Sourcing and ETL  
Team: Hybrid team, 1 SA, 1 DevOps; 1 up to 5 SEs, AE and Performance AE; 4 teams: 2 BE, 1 FE, 1 UX  
Tasks:

Three project stages: REST implementation, test coverage, demo to PO; ETL by means of EF Core Migration and Azure DataFactory (personal responsibility); NPM UX component integration, business logic, Unit and E2E Frontend tests;

- Stage 1 two months: REST, Service Bus, MediatR, test coverage, solution refactoring, demo;
- Stage 2 four months: Configured a Git repository for DataFactory project with 20+ tables; Implemented and parametrized ARM-template and EF-migration to be environment-specific; Linux based CI/CD pipeline was created for ADF schema deployment and pipeline trigger; ETL-schema performance profiling and optimization: iterative optimal and parallel approach; Created STG intermediate layer for table lock reduction; Configured Cosmos DB configuration-data update step by means of Azure Functions; Handling ETL for table splitted into two one-to-zero relations; Full-cycle deployment on DEV, TEST, QA, PROD environments and support; Communicated with Microsoft Azure DataFactory team for product enhancement.
- Stage 3 two months: NPM UX integration, communication with PO, Mocha, Cypress tests.

Tools: Azure SQL Server, Cosmos DB; XUnit, Specflow, PACT Tests; NPM, JSS, Cypress; Azure DevOps; CI/CD to Linux, .NET Core, Web.API, DataFactory, Docker / K8s / Istio; Azure Service Bus.

[WM Reply](#)

Industry: Workforce Vacation Management services  
Project: Calendar Application is a greenfield project for automation of vacation tracking, vacation balance, role-dependent vacation services, company-level Azure AD user authorization and notifications  
Team: 1 PM, 1 SA, 1-2 SEs, 1 QA  
Tasks: Application design, task delegation, UX-prototype, backlog management, application presentation to WM Reply Minsk team, knowledge-sharing;  
• Stage 1 took two weeks: database schema, repository layer, REST API implementation, admin API, frontend implementation, documentation, deployment of the application locally and on QA environment, two step user activation, EF-migrations;  
• Stage 2 took two weeks: Azure AD integration, deploy and test application on Azure, concurrency handling, user activation, company-level application demo.  
Tools: SQL Server, Asp.NET Core 2.0, Angular 7, Azure AD.

*Sitecore Developer*

May 2018 – Mar 2019 (11 months)

[WM Reply](#)

Industry: Agricultural Machinery industry  
Project: Successful start of Sitecore department at WM Reply. First WM Reply Sitecore solution was a strict deadline project consisted of three stages. Third-party APIs integration, SharePoint integration, multi-language, multi-website, Helix based Sitecore 9 solution with Solr search and ADFS authorization. Frontend was provided by two external teams  
Team: One SE for second and third stages; stage one: 1 team-leader, 2 SEs, 1 QA  
Tasks: • Stage 1: APIs and component-based frontend integration, Solr search configuration, buckets task, setting up language configuration for multiple markets, daily communication;  
• Stage 2a: involved Ticketing sub-portal implementation based on third-party non-documented API. Independent work. Proactive communication to deliver the Web-portal on time. Added caching. Exception handling also used for meaningful cases such as third-party API inaccessibility; frontend was provided by external team; tested result on QA, STG; a delivery demo was made at the final stage.  
• Stage 2b: Sitecore solution refactoring: segregated user registration Web-portal;  
• Stage 3: added Experience Analytics (EA) over existing solution architecture on pre-production phase; covered 50 Sitecore Analytics backlog cases with out of the box Sitecore item, MVC approaches. Also enabled Web.API analytics via Sitecore pipeline; 5 of EA pages had cross-website multilanguage configuration; troubleshooting EA; environment set up from scratch; independent work.  
Tools: Sitecore 9, IIS, https, xDB, xConnect, Experience Analytics over Web API, buckets, Solr, Glassmapper, PowerShell, Helix conventions, SitecoreRocks, Unicorn, transformation configs, Total Commander, DotPeek, Gulp, Fiddler, Hyper-V, caching, dictionaries, ADFS.

Industry: Sportswear industry  
Project: Migration of ADAM CMS-dependent system into microservice CMS-independent distributed application.  
Team: 1 SA, 1 PM, 1 Team Lead, 6 SEs, 2 QA, 2 BA, 1 DevOps  
Tasks: 

- Implemented access management .NET Web.API REST service with OData: database schema design, EF data-model inheritance; frontend in NPM, Angular 5;
- SignalR integration;
- .NET memory profiling, memory leak detection;
- Writing retrievable multithreaded patches for processing records in ADAM CMS;
- Gathering information on architectural dependencies; evaluating risks; migrating notification component into independent API service;
- User story: multiple template creation (events, landing page automation process).

  
Tools: 

- Backend: .NET, Asp.NET MVC, Web API, EF, OData, NUnit; SignalR, Solr; MSMQ, web farm, load balancing; .NET Memory Profiler;
- Frontend: NPM, Angular 2-5.

Industry: Workforce Management services  
Project: Migration of Java BPM Talend tool into .NET. The result application has dependencies on XML-service API, Oracle and SQL Server databases. The application performs data communications with the API service and generates Excel reports after business job data-manipulation  
Team: 1 PM, 2 SEs, 1 QA  
Tasks: 

- TeamCity configuration: MSBuild, OpenCover, NUnit, StyleCop;
- Participation in high-level system architecture analysis (dependency on black-box API logic was a risk), helped the team to detect initial-stage system issue that was hidden by third-party API data-processing;
- Implemented licensing logic: generation of a new license, verification of license expiration for multiple timezones, implemented a set of classes for retrieving data from SQL of varied complexity, implemented multiple job-processes containing complex business logic and a large quantity of validation checks (up to 12-15 rules per entity), XML-serialization/deserialization components;
- Component architecture design, implementing cross-cutting concerns: validation, exception handling and logging;
- Excel report generation;
- Writing the specification for QA/business analyst based on Talend BPM jobs, and documentation for end users;
- Coverage of the project with UnitTests: NUnit, Moq;
- Intensive usage and comparison of http xml-requests using Fiddler, using k3diff from Fiddler for comparing requests;
- Weekly communications with the customer time estimations, code reviews, retrospectives.

  
Tools: 

- Backend: .NET, Win Forms; BPM Talend, Java; NUnit, Moq; Log4Net; OpenXML; Fiddler, using k3diff from Fiddler; Akin excel comparison too.
- Databases: Oracle, SQL Server;
- Services: third-party XML API REST service for data-storage and data-processing;
- CI/CD: TeamCity installation and configuration from scratch, StyleCop, Opencover.

Industry: Consumer industry  
Project: Asset management system with faceted search and media storage  
Team: 1 PM, 7 SEs, 3 QAs  
Tasks: Backend: redesigned bundling and minification; extended Solr service layer; implemented XML transformation jobs; proposed splitting of .less files by component structure; extended Web.API REST API; implemented Excel-related tasks on report generation;  
Frontend: implemented/updated range of AngularJS components.  
Tools:

- CMS: Adam; Search: Solr;
- Backend: .NET, ASP.NET Web.API, Aspose.Cells, oData;
- Frontend: AngularJS, TypeScript;
- Database: SQL Server;
- CI/CD: TeamCity, StyleCop, SonarQube.

Industry: Football industry  
Project: A strict deadline project was divided into 3 stages of development process with Business Acceptance Test at the end of each stage.

1. First stage involved implementation of news/video pages using Sitecore and Brightcove;
2. Configuration of Solr indexes for Sitecore search, implementing JSON Web-services;
3. Integration of social services.

  
Team: Hybrid team: 17 members in total. 7 backend SEs, 5 up to 6 QA, 1 BA, 1 DevOps, a delivery manager, 2 project coordinators; frontend was provided by other IT-company.

1. Sitecore development (3 Sitecore SEs, 1 QA);
2. Sitecore Solr search and JSON Web-services (up to 5 backend SEs, 3 QAs);
3. Integrating social services (2 backend SEs, 2 QAs).

  
Tasks: Implemented a set of pages: article, playlist and video pages; integrated frontend code for video player; followed complete Sitecore component implementation cycle.

- Configured Sitecore Solr search indexes for "Fixture Feed", "Category" and "View Feed" services ("View Feed" service provides multiple entities such as "News" and "Articles");
- Listing page news-articles filter logic fixes;
- Integrated Vine, Instagram, Youtube and Twitter services into "Feeds" component in two steps: storing data to Sitecore and then providing JSON to minified frontend;
- Configuring QA environment, investigating the reasons of Sitecore components or Solr search faults and, finally, documenting implemented features;
- Added autoplay Sitecore item configuration for article page videos; implemented Sitecore settings for newsletter component, match-report dates logic, added sponsor logo components with country-to-logo matching.

  
Tools:

- Sitecore: Sitecore 8.1, Solr, Glassmapper, Brightcove, TDS;
- Databases: MongoDB, RavenDb, MSSQL Server 2014; Robomongo, Raven Studio, SSMS;
- Version control: Git, SourceTree, KDiff3 merging tool; feature-branch Git workflow, Jira;
- Environment: IIS, Jenkins; documentation: KB EPAM;
- Backend: .NET Framework 4.5.2, C# 6.0, ASP.NET MVC 5; VS2015, ReSharper;
  - Social services API: Google APIs for YouTube, Instagram, TweetEnvi, Vine;
  - Web API documentation: Swagger;
  - Configuration files search and comparison: TotalCommander;

  
Note: an independent local Sitecore installation for each SE on this project which is different from previous Sitecore project where a single Sitecore instance was shared by the team of 3 members.



Industry: Legal industry  
Project: Topical Landing Pages (TLP) Web-application is a Sitecore based multi-pipeline news portal. The application is able to run multithreading background CPU-bound threads some for background jobs and the rest for the Web-application. A great variety of page types with specialized behavior. Sitecore extentions.  
Team: 1 Team Lead, 2 SEs, 1 QA  
Tasks: .NET implementation of Sitecore jobs and Sitecore command extentions for handling items;

- Implementation of TLP Web-console for handling TLP pages, an extra Sitecore application;
- Multithreading tasks: implementing asynchronous CPU-bound background processes;
- .NET consumption of external JSON API-data, deserialization;
- Communication with the customer both written and verbal;
- Implementation of a set of Web-pages in AngularJS, implementing reusable components, taking desicions on client component dependencies; also responsible for client JavaScript application design;

Tools:

- CMS: Sitecore 7, Solr, SQL Server, PowerShell extension;
- Backend: .NET, ASP.NET MVC, WCF services;
- Frontend: AngularJS.

Industry: Clothing Retail industry  
Project: An advanced E-Commerce CMS system migration to Java, AngularJS stack  
Team: 3 SEs, 1 QA  
Tasks: Migration of old JavaScript logic into AngularJS components; new features such as frontend password management implementation; total Web-application redesign of UI according to specification; fixing backend bugs.  
Tools: Java, Spring MVC; AngularJS; Git, Jira; Oracle Endeca E-Commerce Search.

Industry: Document Management services  
Project: Document management Web-application; strict deadline  
Team: 3 SE  
Tasks:

- Specification/requirements: gathering and analysing document editor, document generation requirements; backlog management, partially involved into team-leader activities; writing application specification.
- Technical desicions: choosing the most aproprate set of frontend tools. CKEditor integration. Handling language-specific aspects for example language cases, multi-language support; implementing intellisence in CKEditor; two competitive user-experience approaches were implemented for document and order autogeneration forms.
- Database schema development in MySQL;
- Implementing application data layer in Java via Spring MVC, Hibernate.

Tools: Java, Spring MVC; MySQL; JavaScript, CKEditor, DataTables; MySQL Workbench, IntelliJ IDEA.

Industry: Games industry  
Project: WebGL game development, rewriting 10 canvas games into WebGL, 4x performance boost; plain JavaScript, no third-party libraries requirement  
Team: 1 PM, 1 SE  
Tasks: Implementation of WebGL image multiplication using OpenGL Shading Language. Rewriting of image processors, timers, adjusting XML markup positioning logic for graphic elements. Extend game scenario generation based on existing XML templates. Performance tests that prove 3 times performance improvement for WebGL.  
Tools: Plain JavaScript, OpenGL Shading Language; PHP, MySQL; MySQL Workbench, IntelliJ IDEA.

Industry: Medical Insurance industry  
Project: .NET solution that provides a single end-to-end user experience for administering reimbursement accounts. The application includes decision-making user-experience and streamlines health care management for consumers  
Team: 1 PM, 8 DBAs  
Tasks: Data-support tickets processing for multiple application databases. Up to 20 tables involved, large data set, tickets are processed for multiple environments including production.  
Tools: .NET, ASP.NET, Notepad++, SQL Server.

Industry: Healthcare industry  
Project: Health-care online service, a greenfield project with stateless architecture.  
Team: 1 SA, 2 SEs  
Tasks: Following the defined implementation path of stateless architecture. Implementation of SQL stored procedures, data retrieval on backend and data visualization on frontend side.  
Tools: .NET, ASP.NET MVC, SQL Server; jQuery, DataTables; Jira.

Industry: Human Resource Management services  
Project: Resource Management System  
Team: 1 PM, 3 SEs  
Tasks: Backend and Frontend development. Extending existing functionality  
Tools: .NET, ASP.NET MVC, SQL Server.

Industry: Science  
Project: A software ecosystem for making statistical forecasts and performing data analysis  
Team: 4 SEs  
Tasks: Algorithms of cluster analysis implementation  
Tools: Code Blocks and C++.