Serhiy H.
Senior Full-stack Engineer

SUMMARY

• Full-stack engineer with 6+ years of experience with scalable architectures, clean APIs, and responsive interfaces
• Developed and implemented backend systems for fintech and crypto applications using Node.js, NestJS, and Prisma, including integrations with multiple payment providers and API gateways, resulting in scalable architectures handling diverse data formats.
• Optimized database interactions and workflows in corporate platforms with AWS Neptune, DynamoDB, Elasticsearch, and Redis, accelerating integration tests by 15% through redesigned test environments.
• Built asynchronous event handling and caching mechanisms with NATS, Redis, and BullMQ for product management and payment systems, improving reliability via message-driven communication.
• Integrated monitoring tools like Prometheus and Grafana in deployment pipelines using GitLab CI, enabling metrics collection for endpoints and integrations in real-time services.

TECHNICAL SKILLS

Main Technical Skills	JavaScript (6 yr.), Node.js, NestJS, Express, Fastify
Programming Languages	C#, Java, JavaScript (6 yr.), Python, Solidity, TypeScript
.NET Platform	ASP.NET, nuget
JavaScript Frameworks	Express, NestJS, Node.js, Nuxt, React, Vue.js
JavaScript Libraries and Tools	Fastify, NPM, Puppeteer, Webpack
Java Frameworks	Spring
Databases & Management Systems / ORM	AWS DynamoDB, AWS ElasticSearch, Elasticsearch, FireStore, Manticore, MariaDB, MongoDB, MySQL, PostgreSQL, Prisma, Redis, Sequelize, SQL, Typeorm
UI Frameworks, Libraries, and Browsers	CSS, HTML, Pug, SCSS, Semantic UI
Cloud Platforms, Services & Computing	AWS

Amazon Web Services	AWS CloudWatch, AWS Cognito, AWS DynamoDB, AWS ElasticSearch, AWS EventBridge, AWS Lambda, AWS MQ, AWS Neptune, AWS S3
QA, Test Automation, Security	Apache Maven, Cypress, Jest, Mocha, Puppeteer
Platforms	Apache Solr, Arc XP
SDK / API and Integrations	Api Gateway
Message/Queue/ Task Brokers	AWS MQ, BullMQ, NATS
BlockChain and Decentralized Software	Chai
Virtualization, Containers and Orchestration	Docker, Terraform
Version Control	Git
Deployment, CI/CD & Administration	GitLab CI, Jenkins
Logging and Monitoring	Grafana, Prometheus
Third Party Tools / IDEs / SDK / Services	IntelliJ IDEA, Microsoft Visual Studio Code, Visual Studio, WebStorm
Operating Systems	Linux, macOS, Windows
Mail / Network Protocols / Data transfer	NAT

WORK EXPERIENCE

System for managing products from multiple suppliers

(06/2025 – Present)

Overview: A platform that aggregates product data from various suppliers and ensures full traceability of goods through the integration of marking codes. The system supports collecting codes from multiple external sources, attaching them to products, validating correctness and completeness, and synchronizing information with supplier systems. Responsible employees can review and approve codes through an internal validation workflow.

Key Responsibilities:

- Implemented support for product marking codes, including storage, processing, and validation

- Integrated multiple external sources for receiving unique codes and supplier product data
- Developed workflows for attaching codes to products and validating them by responsible staff
- Wrote raw SQL queries for complex data retrieval and transformation, optimizing performance in MySQL
- Added support for search using Manticore
- Built asynchronous integration flows using NATS for distributed event handling Implemented caching and temporary data storage with Redis

Achievements:

- Designed and implemented a complete subsystem for tracking and validating marking codes
- Successfully integrated multiple suppliers with differing data formats and flows Improved performance of critical operations by writing optimized raw SQL instead of relying on ORM
- Strengthened system reliability by applying message-driven communication through NATS

Tech Stack: git, node.js, fastify, mysql, manticore, nats, redis, vue

Service for buying and selling cryptocurrencies

(02/2025 – 05/2025)

Overview: An embeddable solution for banking applications that allows users to buy and sell cryptocurrency using fiat currency. The system interacts with multiple crypto-processing providers, enabling flexible switching between partners based on business requirements and conditions.

Key Responsibilities:

- Developed the backend application from scratch using Node.js, NestJS, and Prisma
- Designed an architecture with support for multiple crypto-processing providers Implemented server metrics and endpoint/integration call statistics collection using Prometheus with visualization in Grafana
- Configured CI/CD pipelines in GitLab for automated deployment
- Integrated with external partner APIs and implemented business logic for crypto exchange

Achievements:

- Built the backend from scratch, including architecture and scalable integration support
- Implemented support for multiple processing providers with flexible configuration and switching
- Set up a monitoring system for metrics and integration calls via Prometheus with Grafana visualization
- Established a reliable CI/CD pipeline using GitLab CI

Tech Stack: git, npm, node.js, nest.js, prisma, PostgreSQL, redis, s3, grafana, prometheus, node-exporter, fireblocks

Payment gateway

(05/2024 – 03/2025)

Overview: A comprehensive payment gateway solution designed to aggregate both card payments and alternative payment methods (APMs), simplifying transaction processing across multiple payment providers. Integrates multiple payment systems including Zen, Paycombat and Payadmit, providing seamless processing of both card payments and APMs.

Key Responsibilities:

- Development of new functionality, including integration with payment system APIs
- Refactoring the architecture to eliminate technical debt and improve performance
- Bug fixes and participation in code reviews Communication with the team
- Communication with payment systems support team

Achievements:

- Optimized existing code to improve readability and reduce technical debt, reducing development time for next integrations.
- Implemented integrations with multiple payment systems and methods. Technologies: git, npm, node.js, aws EC2, Nest.js, TypeScript, BullMQ, payment system's API

Corporate Intranet Platform

11/2022 – 05/2024

Overview: Development of a corporate application designed to manage employees, share news, strengthen corporate culture and interaction within the company. The platform provides access to information about employees, company news, corporate events and other internal resources. Integration with various external and internal services was also implemented to ensure automation and improve usability.

Key Responsibilities:

- Implement new functionality, including integration with Amazon Neptune for graphing and AWS Verified Permissions for access control
- Optimizing database interactions, including the use of Redis, DynamoDB and Elasticsearch
- Adding OpenAI chatbot integration
- Writing integration tests to ensure system stability Creating documentation for developers
- Fixing bugs and conducting code reviews Interaction with the team Achievements:
- Developed and maintained an internal framework for developing the server side of the application with graphql and integration with multiple aws services
- Finalized the document management functionality, fixed bugs in the implementation, developed a mechanism of interaction between Amazon Neptune, DynamoDB, ElasticSearch, Redis
- Accelerated the execution of integration tests by 15%, redesigned the mechanism of launching and initializing the test environment, which simplified test development

Tech Stack: git, npm, yarn, node.js, redis, solr, localstack, elasticsearch, aws cognito, aws lambda, aws event bridge, aws verified permissions, amazon

neptune, amazon S3, dynamoDB, apollo graphql, docker, terraform, TypeScript, React.

Content delivery application

Overview: A web application that allows users to manage their content through an administrative panel and embed it on their websites as widgets. The application provided a flexible system for customizing widgets, including design and functional options, as well as analytics tools, such as Google Analytics, to track user interaction with content.

Key Responsibilities:

- Development of administrative panel interfaces for content management, including creation of widgets and customization of their settings
- Implementation of functionality for generating customizable widgets compatible with various websites
- Interface optimization to improve user experience and adaptation for mobile devices
- Fixing bugs and improving existing code
- Writing documentation for developers and end users Interaction with the team

Achievements:

- Developed a widget customization system, providing flexibility in widget design and functionality
- Implemented Google Analytics support to track widget interactions, providing clients with detailed usage statistics
- Improved interface styling using SCSS and BEM, improving code readability and scalability
- Developed preview functionality that allowed full preview of widgets on the admin panel

Tech Stack: git, npm, Vue.js, Nuxt.js, Google analytics, scss, pug. bemify

Application for managing participants in the organization

12/2020 – 04/2021

Overview: Web application for managing data of members of a public organization. The service allows centralized storage and structuring of information about members, providing convenient tools for searching and filtering data. The application simplifies organization administration by providing an interface and efficient functionality for data processing.

Key Responsibilities:

- Implementation of new functionality, including creation of an API for managing participant data and setting up access roles
- Optimize existing functionality to improve performance and stability
- Development of a notification system to track changes to member data Bug fixes
- Interaction with the team

Achievements:

- Developed a module for importing/exporting data, to pdf

- Implemented the use of MongoDB to store non-relational data, which enhanced the application's capabilities
- Deployed the application on Heroku

Tech Stack: git, npm, docker, node.js, PostgreSQL, Nest.js, TypeScript, React, Heroku, MongoDB

Contextual advertising service

(08/2020 – 12/2020)

Overview: The service provided tools for publishers and advertisers to work with contextual advertising. The application included functionality for creating, managing and analyzing advertising campaigns, as well as tools for optimizing content monetization. The developed interface allowed users to customize advertising strategies, track advertising effectiveness and interact with data in real time.

Key Responsibilities:

- Support and refactoring of legacy scripts that embed ad units on client pages to improve stability and compatibility
- Development of a new personal account to manage advertising placement and track campaign efficiency
- Implementation of functionality for setting up tracking tags, integration with analytics systems
- Writing unit and integration tests using Jest
- Automating build and deployment processes using Jenkins Interaction with the team

Achievements:

- Successfully redesigned legacy scripts to improve compatibility with modern browsers, and set up work with the new API
- Finalized the personal cabinet for customization of advertising campaigns Automated the launch of e2e tests in the CI/CD Pipeline

Tech Stack: git, npm, docker, React, Material UI, node.js, MySQL, Fastify, jest, TypeScript, Jenkins, aws, cypress, puppeteer

News web platform

(10/2019 – 07/2020)

Overview: A web application for publishing and managing organization news. Users could view current events and administrators could manage content through the CMS. The application provided a responsive design to work on different devices and platforms.

Key Responsibilities:

- Development of new functionality for news display, including sorting and filtering Integration with Arc XP for content management
- Interface optimization to ensure correct display on mobile devices (responsive layout)
- Fixing bugs in the interface and improving user experience Writing documentation for developers

Achievements:

- Designed and implemented a responsive interface that improved user experience on mobile devices
- Successfully integrated Arc XP, which simplified content management for administrators
- Optimized styling using SCSS and BEM methodology, improving code readability and maintainability

Tech Stack: git, npm, es6, Nuxt.js, scss, pug, Arc XP, Responsive layout

Image publishing service for content distribution platforms

(05/2019 – 10/2019)

Overview: A web application that allows users to search for images through search engine integration and publish them to various social networks. The service provides a user-friendly interface for managing publications and integration with several platforms for content distribution.

Key Responsibilities:

- Development of functionality for integration with APIs of systems for image storage and processing
- Optimization of interaction with MariaDB database to improve performance Legacy code support

Achievements:

- Developed functionality to integrate with Cloudinary for image storage and processing
- Optimized authentication processes with JWT, improving application security and performance
- Added cache using Redis, improving server efficiency and performance

Tech Stack: git, Maven, Java, Spring Framework, Cloudinary, MariaDB, Redis

Real-time messenger, web chat

(01/2019 – 05/2019)

Overview: A real-time messenger with direct messaging functionality between users. The application provided a robust and scalable messaging mechanism, including user management and authentication, notification handling, and scaling support for a large number of connections.

Key Responsibilities:

- Development of API for frontend and server side interaction using Web APIs Implementation of authentication and user management system based on
- Identity Framework
- Fixing bugs and ensuring system stability
- Writing technical documentation for the team

Achievements:

- Optimized SignalR functionality, improving connection stability and code quality Implemented a role model based on the Identity Framework, improving application security

- Implemented group chat functionality

Tech Stack: git, C# ASP.NET, Entity Framework, Web API, SignalR, Identity
Framework

EDUCATION

  - Bachelor of Programming and Information Technologies