

Elvin Bayramov

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Senior full-stack software engineer with more than 7 years of experience in software development, 2 years of leading teams, and a Master's degree in Data Science and Artificial Intelligence from the University of Strasbourg. Deep expertise in React/Typescript, Ruby on Rails, Laravel, PostgreSQL, Redis, GraphQL, TDD, and documentation. Experienced in Python, Node.js, optimization techniques, AWS, and project management.

Having worked on both commercial (e.g., B2B SaaS, ERP systems) and research projects (e.g., Explainable AI, ontologies, embedded), I combine my diverse experience and expertise to build accessible, robust, performant, transparent, and maintainable systems.

Languages: English, Azerbaijani, Ukrainian, Russian

TECHNICAL SKILLS

- **Front End:** React, Next.js, Typescript, Eslint, Relay, UI/UX, a11y, responsiveness, Webpack, Tailwind, AntDesign, vanilla-extract, Storybook, Playwright, Jest
- **Back End:** Ruby on Rails, ActionPolicy, Laravel, Node.js, GraphQL, REST, PostgreSQL, MySQL, Redis, RSpec, Sidekiq, Capybara, Docker
- **Data Science:** Python, R, Pandas, Keras, numpy, scikit-learn, OWL
- **Other:** Documentation, Agile, Research, Microservices, Trunk-based Development, Test Driven Development (TDD), Regex, Git

EXPERIENCE

Senior Software Engineer / Team Leader in datarockets

Aug 2021 - Oct 2025

Project: NDA

Stack: Ruby on Rails, PostgreSQL, QuickBooks Online (QBO), Sidekiq, ViewComponent, Tailwind, RSpec, Capybara, AWS

An internal system that allows managing delivery schedules and contracts and closely integrates with several QuickBooks Online (QBO) accounts. As a team lead and lead developer, I led the project from start to finish, designing and building the essential subsystems and integrating with QuickBooks Online, and established and curated the development process.

Key contributions:

- led the development with a small team of developers;
- established and curated code quality best practices, including code reviews and test-driven development;
- formalized the business domain, prepared domain describing documents, achieving the shared vision between stakeholders and a dev team;
- built an ELT pipeline for synchronizing data between the application and QuickBooks instances;
- built a complex append-only payments system that is closely integrated with QBO;
- designed and implemented distributed transactions for the payments system.

Project: SpendHound

Stack: Ruby on Rails, PostgreSQL, DDD, GraphQL, TypeScript, Next.js, Sidekiq, RSpec, Docker, AWS, OAuth

A SaaS platform that provides cost optimization insights by collecting and analyzing data from over 25 platforms. As a team lead and a lead developer, I led the development process, designed and curated the development of essential subsystems, established, and curated processes that allowed us to guarantee the best code quality, better user experience, and a short feedback loop from stakeholders.

Key contributions:

- led the development of a medium-sized team of developers, collaborating with PM, Tech Lead, and stakeholders;
- mentored 5 developers, helping them to grow in areas of interest;
- led gradual migration to CQRS- and Events Sourcing-based architecture with zero downtime;
- led the efforts for achieving SOC2 compliance;
- achieved 95% test coverage, ADRs/RFCs, Docker/GitHub Actions CI/CD;
- built a GraphQL API with Relay for type-safe frontend;
- built a Custom RBAC system with granular permissions (using Action Policy);
- iteratively optimized the essential features implementation, cutting up to ~90% of page load time;
- designed asynchronous malware scanning for uploaded files;
- built 10+ enterprise integrations (QuickBooks, NetSuite, SAP, Xero, Okta, Google Workspace, Azure AD, OneLogin, etc.) and established a process for streamlining this process;
- designed secure silent authentication to improve user experience while preserving security goals;

- worked closely with designers in a process of design review to provide early feedback, accelerating feature delivery by ~40%;
- wrote and supported technical documentation, gathered requirements, and prepared feature and task descriptions.

Project: Postbox

Stack: Next.js, React, Typescript, HeadlessUI, Storybook, Django

An online interface for interacting with Freewrite devices, allowing users to work with drafts, user profiles, etc. As a software engineer, I worked on creating a UI library for the project, redesigning the existing web application, and designing the front-end features related to the NaNoWriMo event.

Key contributions:

- implemented UI library using Headless UI and Storybook;
- rewrote the web application from scratch using the UI library;
- built charts and ranks for NaNoWriMo event.

Project: Glassfrog

Stack: Ruby on Rails, PostgreSQL, React, GraphQL, Sidekiq, Cabypara, RSpec

A Holacracy support tool that helps design and maintain the Holacracy structure in your organization. As a software engineer, I worked on building new features, refactoring the legacy subsystems, and maintaining the documentation.

Key contributions:

- built integration with Zapier, allowing customers to build their own pipelines;
- worked on upgrading Bootstrap 4 to Bootstrap 5;
- owned and curated the documentation, allowing developers to better understand the system.

Middle Software Engineer in Skyweb Pro

Feb 2021 - Aug 2021

Project: NDA

Stack: Laravel, PostgreSQL, PHPUnit, Nova

A freelancing marketplace for people to find specialists. As a lead developer, I designed the system's architecture, owned and built the back-end application, and collaborated closely with

PM and other developers.

Key contributions:

- designed and built the back-end application;
- built the admin panel using Laravel Nova;
- designed and built SMS verification system;
- curated the development of the front-end application;
- wrote and curated the documentation for API and system requirements.

Middle Software Engineer in AG Development

Aug 2019 - May 2021

Responsibilities:

- built and maintained an electronic document system for a government agency;
- developed several e-commerce platforms;
- introduced and maintained CI/CD and containerization using Docker.

Project: Internal tools for a government agency

Stack: Laravel, Vue.js, Bootstrap, PostgreSQL

A set of specialized systems focused on streamlining the business processes in an Azerbaijani government agency. As a lead developer, I built an electronic document management system, its integration within the ecosystem, and collaborated closely with PM and the agency to achieve their vision.

Junior Software Engineer in Azercosmos

Jul 2018 - Sep 2019

Project: ERP system for Azercosmos

Stack: Vue.js, Laravel, Websockets, Kotlin, OCR, Tesseract

An Enterprise Resource Planning (ERP) system for Azercosmos. As a developer, I built and maintained web applications for Contract Management System, Blog, Business Cards Database, and an Android application with built-in OCR for Business Cards Database.

Key contributions:

- built an Android application for Business Cards Database with Tesseract OCR;
- designed and built a real-time notifications system based on Websockets;

- rewrote and delivered a Contract Management System in a record time after it wasn't delivered by another team.

Project: Solar system simulation

Stack: Unity, C#

A Unity-based Solar System simulation with real-time satellite positioning. As a developer, I designed and implemented the simulation with no prior knowledge of Unity.

Key contributions:

- computed planets' movement formulas using Machine Learning techniques on NASA's JPL Horizons data;
- implemented a precise Solar System simulation with an integration to Flask API that provided satellites positions;
- finished the project in a month, having no prior experience in Unity, which resulted in an offer from Azercosmos.

EDUCATION

- Internship in Counterfactual Explanations Generation For Knowledge-Based Systems in LITIS Lab
- Masters in Data Science and Artificial Intelligence in L'Université Franco-Azerbaïdjanaise | GPA: 100/100 | Graduated with honors
- Bachelor in Computer Engineering in National Aviation Academy | GPA: 97.7/100 | Graduated with honors

OTHER PROJECTS

CanSat Project

Stack: C++, Embedded, Python

A software for a system of a satellite and a ground station with bidirectional communication using radio modules.

[GitHub Repo](#)

Explainable Symbolic AI project Explainable Symbolic AI project

Stack: Python, OWL, scikit-learn, React, Typescript

An ensemble of Support Vector Classifier (SVC), that handles classification, and an OWL-based Symbolic AI model, that verifies classification results using domain rules.

[GitHub Repo](#)

STCA-TCAS Simulation

Stack: Unity, C#

Air traffic simulation with integrated Short Term Conflict Alert (STCA) and Traffic Collision Avoidance System (TCAS).

[GitHub Repo](#)

Enhanced Whale Optimization Algorithm

Stack: Python, numpy

A meta-heuristic optimization algorithm based on the hunting behavior of humpback whales, and its usage to solve several optimization problems.

[GitHub Repo](#)

Floating value Represented with INTeger

Stack: C++, Mathematical Modeling

A custom C++ implementation of Floating value Represented with INTegers (FRINTs), including mathematical modeling behind them.

[GitHub Repo](#)