



ANDREW SHEDOV



RESUME

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Summary

Name: Andrew Shedov (Russian: Андрей Шедов, IPA: [ɐnˈdɾiej ˈʂɛdɐf])

Born: 1991 🕸

I have more than 13 years of programming experience, including 9 in web development. I specialize in full-stack development of modern, feature-rich

websites. I am engaged in design, development, administration of databases, web servers, VPC, S3, ensuring cybersecurity, and developing software for DevSecOps and other areas. I like to create architecture from scratch and bring projects to an ideal state.

Currently, I am available for text-based collaboration only, as I am in the active stage of learning spoken English. I utilize advanced AI tools, ensuring fast and accurate communication via Slack, Discord, email, etc.

Education and Languages

Polytechnic College of Bryansk State Technical University 

Specialization: Software Engineering

Period of study: 2007-2011 (4-year program)

Form of study: Full-time

Diploma:



ORCID: 0009-0001-9559-1696

Russian: Native Speaker

English: A2

I am currently actively learning English.

Collaboration within an international team can be carried out in written format via advanced AI translation.

Work Experience

SHEDOV.TOP

shedov.top

End-to-end delivery of web projects: from full-stack development to architecting fault-tolerant and secure infrastructure (currently for the Russian-speaking market only).

Positions:

- Full-Stack Developer.
- Architect, developer and administrator of databases, web servers, VPC, S3.
- DevSecOps.
- Cybersecurity Specialist.

Responsibilities:

- Creating online stores, news and content sites, supporting, changing and adding functionality.
- Design, development, administration of databases, web servers, VPC, S3.
- Creation of automated website backup systems in S3.
- Ensuring cybersecurity and DevSecOps.

Working period:

From 2017 to the present.

CRYSTAL

crystal.you

CRYSTAL is an open-source social network currently under development.

More about the project.

Positions:

Management: Founder, CEO, CTO.

Software Engineering: Architect, Full-Stack developer, UI/UX designer.

Infrastructure: Architect, developer and administrator of database, web server, VPC. DevSecOps, Cybersecurity Specialist.

Responsibilities:

- Development, promotion, and design of the project.
- Design and development of frontend and backend architecture (from UI/UX to API).
- Design, development and administration of database, web server, VPC.
- Ensuring cybersecurity of the website, VPC, S3.
- Creating and managing backups S3 (SSE-KMS).

Working period:

From 2023 to the present.

Architecture: SPA, RESTful API, FSD.

Technologies:**LARS:**

Language: Rust

Frontend: Leptos

Backend: Actix Web

Database: ScyllaDB

MERN:

Language: JS

Frontend: React, Redux, TanStack Query

Backend: Express.js

Database: MongoDB

General:

Languages for DevSecOps: Python, PHP

Infrastructure: VPC, Nginx

Layout: Flexbox, Grid

MTK ICEBERG

langvey.ru

Location: Moscow

Positions:

- Full-Stack developer.
- Cybersecurity Specialist.
- Web server and database administrator.

Responsibilities:

- Company website support, changing and adding functionality.
- Protecting the infrastructure and website against cyber threats, rapid incident response, investigation, mitigating hacker attacks, remediating vulnerabilities, monitoring system integrity, and implementing proactive security measures.
- Working with a web server, database (MySQL), SSL certificates.
- Creating and managing backups S3 (SSE-KMS).

Working period:

From 2021 to the present.

CMS: Joomla

Technologies: Nginx, PHP, JS, MySQL, Flexbox, Grid.

Specialization

My main specialization: full-stack development in various tech stacks and CMS.

Examples of my code across various tech stacks and CMS.

Results of technical tests and audits of websites, created by me.

Full-Stack Development & System Architecture

Langs: Rust, JS, PHP, Python

Databases: ScyllaDB, MongoDB, MySQL

Environment & Tools: Linux, Git, GitHub, Docker, AI

Full-Stack Engineering: Deep understanding of client-side and server-side interactions. Architecting systems from the ground up, selecting the optimal tech stack tailored for high performance, excellent SEO metrics, and security.

Systems Thinking: An engineering-driven approach to development, combining clean code practices with deep server infrastructure tuning and full deployment process automation.

Microservices & Containerization: Designing and deploying scalable web applications using Docker Compose. Expertise in decoupling monoliths into isolated services, configuring internal networks, and orchestrating seamless interaction within a unified ecosystem.

AI: Integration of LLMs into the workflow to accelerate development. Deployment of local AI infrastructure (Ollama, Open WebUI) for secure code analysis, test generation, and architectural design of complex systems.

LARS (Leptos, Actix Web, Rust, ScyllaDB): High-performance web application development with a focus on speed and safety. Experience in building scalable systems using SSR, hydration, and distributed databases for Big Data tasks.

MERN (MongoDB, Express.js, React, Node.js): Design and implementation of full-stack web applications. Building dynamic interfaces, implementing RESTful APIs, and optimizing unstructured data management in MongoDB.

Key Experiences at MERN and LARS: Development of the CRYSTAL social network.

WordPress: Development of fully custom themes and plugins, with deep performance and security optimization.

Electron.js: Creation of cross-platform desktop applications. Ability to integrate Electron with high-performance databases (ScyllaDB | MongoDB) to build local data management tools.

Website tests shedov.top (code):

SSLlabs.com/SSLtest A+

PageSpeed Insights 100 || AI Agent: 3/3

[Validator.w3.org](https://validator.w3.org) no errors

[Clickjacker.io](https://clickjacker.io) safe

Frontend

JS/TS (React, Next.js: SSR/SEO), Rust (Leptos: SSR/SEO), i18n

Architecture: SPA, FSD

Communication protocols:

TCP/IP, HTTP/2, HTTP/3, WebSocket

Data transfer tools:

Fetch API, Axios, TanStack Query, SWR, AJAX

State Management:

React Redux, Redux Toolkit

Session & storage mechanisms:

HTTP cookie, localStorage

Low-level synchronization and shared memory:

SharedArrayBuffer, Atomics, TypedArrays

Layout:

Flexbox, Grid, Bootstrap, SASS, SCSS

Figma

Layout creation - Pixel Perfect.

Creating JS/CSS/SVG animations with and without frameworks.

Responsive layout for all devices, browsers, and screen sizes.

Valid layout according to W3C standards.

Building correct semantic markup.

ESLint, Prettier, code testing, testing in BrowserStack.

Website speed optimization.

Working with bundlers: Webpack, Vite

Backend

Rust (Leptos), Node.js (Express.js), PHP

Backend development with emphasis on high performance, energy efficiency, and optimal resource utilization (CPU, memory, I/O).

Architecture: RESTful API, FSD

Communication protocols:

TCP/IP, HTTP/2, HTTP/3, WebSocket

Data transfer tool: AJAX

Session & storage mechanism: HTTP cookie

Rust

Frameworks: Leptos, Actix Web, Axum

Multithreading: std::thread, Mutex, Arc, channels

Async Runtime: Tokio

Process Manager: systemd

Auth & Security: jsonwebtoken, Argon2, bcrypt

Crypto: ring, openssl

WebSocket: Actix Web, Axum, tokio-tungstenite

Serialization: Serde

Images: image

Databases: MongoDB Driver, ScyllaDB Driver

/Rust

Node.js

Framework: Express.js

Multithreading: worker_threads, SharedArrayBuffer, Atomics, Int32Array

Process Manager: PM2

Auth & Security: jsonwebtoken, Argon2, bcrypt

Crypto: crypto

WebSocket: ws

Images: Sharp

Databases: MongoDB Driver

/Node.js

Databases:

ScyllaDB

Driver: Rust.

Knowledge of queries and commands, working through the console.

MongoDB

Driver: Rust, Node.js.

Knowledge of queries and commands, working through the console and in MongoDB Compass.

MySQL: Knowledge of queries and commands, working through the console and in phpMyAdmin.

Manual and automatic API testing with Postman.

Security:

IAM:

Implementation of User Identity Management (Registration & AAA concepts).

Role-Based Access Control (RBAC).

Validation of JWT and Cookie when accessing secure APIs.

Network & API Protection:

CORS: control over origin domains, methods, and request headers.

Limiting API access by HTTP methods, routes, and headers.

Session security:

Using secure HTTP cookies with the flags: Secure, HttpOnly, SameSite:Strict.

CSRF protection at the cookie policy level and server token validation.

HTTP security headers:

X-XSS-Protection, X-Content-Type-Options, Strict-Transport-Security, Content-Security-Policy, Referrer-Policy, Permissions-Policy, X-Frame-Options.

WordPress

Multisite, WooCommerce, The SEO Framework, i18n, JS, React, AJAX, PHP, MySQL

Creating fully custom WordPress themes, without using Elementor or plugins.

Creating stores on WooCommerce.

Expanding functionality, creating a registration/authentication form, callback, etc., with or without plugins.

Creating plugins.

Optimizing website speed.

Website creation and setting taking into account cybersecurity and SEO optimization.

Creating and managing backups S3 (SSE-KMS).

Custom Theme for the shedov.top website.

Databases

ScyllaDB, MongoDB, MySQL

Design, creation and optimization for high-load systems.

Design of scalable systems for storing and processing Big Data.

Management and administration, including cluster configuration and ensuring fault tolerance.

Ensuring cybersecurity.

Creating and managing backups S3 (SSE-KMS).

AI

Cloud: Gemini

Local:

— **Model:** Gemma

— **Frontend:** Open WebUI, Chatbox

— **Backend:** Ollama

— **All-in-one:** LM Studio

Leveraging AI to accelerate development, improve code quality, analyze bugs, and generate tests and documentation.

Deploying local models to ensure data privacy and enable offline workflow.

DevSecOps

Python, Rust, JS, PHP

Linux, Git, GitHub

Docker (Compose, Network Isolation), CI/CD Security

Containerization & Infrastructure Management: Designing and implementing microservices architectures based on Docker Compose. End-to-end automation of web application stack deployment, ensuring seamless integration of database, backend, and frontend layers.

Infrastructure as Code: Declarative description of the entire project infrastructure via Docker Compose, enabling instant environment replication and one-command deployment of identical system copies on new VPC servers.

Automated Service Lifecycle: Implementing Certbot for automated SSL certificate renewal and configuring Nginx for dynamic configuration reloads without service interruption (Zero Downtime).

Infrastructure Automation & Monitoring: Development and implementation of an automated cloud infrastructure state monitoring system. Implemented auto-recovery logic for virtual machines upon downtime detection using the [Cloud.ru SVC Public API](#).

Example of VM monitoring and auto-start system in VPC:

[GitHub Repository](#)

[Telegram Live Report](#)

Backup & Disaster Recovery: Development and implementation of automated backup solutions for web applications with secure off-site storage in S3.

Example of an Automated Website Backup System in S3:

[Telegram Live Report](#)

Security:

Network Micro-segmentation: Designing and implementing isolated network architectures using Docker Networks. Segmenting infrastructure into logical layers to minimize attack vectors and enforce Zero Trust concepts at the container level.

Database Hardening & Isolation: Ensuring database invisibility from external networks and the frontend layer. Configuring restricted internal networks for databases to eliminate unauthorized inbound and outbound traffic.

Cloud & Infrastructure

VPC

Linux, TCP/IP

Design, creation and managing VPCs.

IAM: Access management and secure resource isolation using service accounts and access keys.

[Creating and configuring a VM.](#)

[Deploying websites on VPC.](#)

Configuring VPC with cybersecurity in mind.

Creating and managing backups S3 (SSE-KMS).

S3

Amazon S3 API, AWS CLI, WORM, IAM, SSE-C, Bucket Versioning, Object Lock

Development and implementation of solutions for automated backup of web applications.

Disaster Recovery Plan: Management of data recovery processes to minimize downtime and ensure system integrity.

Data Integrity Control: Implementation of a multi-level validation system for database dumps and file object verification to eliminate the risk of **Data Corruption**. Features local integrity auditing (**CRC32**) combined with S3-side verification (**SHA-256, MD5/ETag, CRC32C**).

Data Streaming: Implemented **streaming ingestion/egress** mechanisms via **Unix Pipes** between S3 and target systems to optimize **I/O** performance and enhance data security during recovery.

Data Privacy Compliance: Ensuring strict adherence to data protection laws and regulations. Technical implementation of security controls to meet **GDPR (EU)**, **HIPAA/SOC2 (USA)**, and local data protection regulations.

Security:

IAM: Implementation of the **PoLP/RBAC** with role separation (admin, editor, etc.) and use of restricted service accounts.

Immutable Storage (WORM): Configuration of **Bucket Versioning** and **Object Lock (COMPLIANCE)** to protect data against modification, malicious deletion, or **ransomware** attacks.

SSE-KMS: Designing and implementing **Data-at-Rest** encryption schemes using **Server-Side Encryption** and **KMS**. Developing key access auditing and monitoring systems.

Monitoring:

Real-time Alerts: Integration of backup solutions with **Telegram Bot API** for status monitoring and rapid incident response.

Example of an Automated Website Backup System in S3:

Telegram Live Report

Web Servers

Linux, Nginx, TCP/IP

Creation, configuration and administration of web servers based on Nginx.

Installation and configuration SSL certificates.

Ensuring cybersecurity.

Creating and managing backups S3 (SSE-KMS).

SSL test on the website shedov.top:

SSLlabs.com/SSLtest **A+**

Cybersecurity & Infrastructure Hardening

IDS/IPS, WAF, IAM, VPC, Linux, Nginx, TCP/IP

Ensuring cybersecurity of VPC and web infrastructure.

Design and implementation of IDS/IPS and WAF solutions for protecting infrastructure and web applications.

Creating sites and configuring Nginx with cybersecurity in mind.

Configuring VPC with cybersecurity in mind.

Installing and configuring SSL certificates.

Vulnerability Management & Infrastructure Security:

Infrastructure security auditing and vulnerability assessment using Nmap, ZAP (Zed Attack Proxy), and OpenVAS.

Website Security Tests shedov.top:

SSLlabs.com/SSLtest **A+**

Clickjacker.io **safe**

SEO

Knowledge of methods and experience in website promotion.

Building Correct Semantic Markup.

Working with services: Google Analytics, Google Search Console, Yandex Webmaster, Yandex Metrica.

Testing the shedov.top website:

PageSpeed Insights

Quality Assurance

TCP/IP, MongoDB, MySQL

Testing the user interface and website adaptability in different browsers.

Knowledge of testing methods and types.

Ability to create test plans, test cases and bug reports.

Working in Azure DevOps and Jira.

Manual and automated API testing with Postman.

Using in work - BrowserStack.

Example of my bug report on GitHub.

crates.io

Creating and publishing a crates.

Development of CLI tools and libraries.

Configuring Cargo.toml and workspace structure.

Versioning and release management.

Dependency optimization and build size reduction.

Setting up GitHub Actions/CI for automated publishing to crates.io.

Creating documentation.

npm

Creation and publishing of npm packages.

Development of CLI tools.

Configuring Trusted Publishing (Built and signed on GitHub Actions).

Versioning and release management.

Package structure optimization (dependency minimization).

Setting up GitHub Actions / CI for automated publishing package.

Working with npm link and local package development.

Creating documentation.

Other Skills

Linux, Git, GitHub

Experience in creating extensive documentation for large websites, npm packages and crates.

In-depth knowledge of computer hardware: assembly, diagnostics, selection of compatible components, and system upgrades. Experienced in building workstations and server-grade systems tailored for specific tasks: high load, fault tolerance, and scalable data storage.

I use the code editor: Visual Studio Code.

I work in systems: Windows 11 Pro, Debian, Kali.

LEGAL

CREATED BY ANDREW SHEDOV