

Danil Agafonov

Staff Software Engineer

Years of experience: 14

Current Location: Vancouver, Canada

Contacts: i@danil.codes, @braska (Telegram)

Education: Kazan Federal University (Higher Institute of Information Technology and Intelligent Systems, Bachelor's degree, Applied Informatics, 2014-2018)

Languages: English (Full Professional Proficiency), Russian (native)

Links:

<https://github.com/braska> (personal, mostly for OSS)

<https://github.com/DanilAgafonov> (work account)

<https://www.linkedin.com/in/danil-agafonov/>

Employment history

Diligent (previously known as ACL dba Galvanize)

Staff Software Engineer, Nov 2022 to Present

Designing and building solutions using serverless tools on AWS with a focus on performance and scalability: multi-region deployment, hundreds of thousands online users. Designing foundational services which are used by many teams. Building Vancouver office technical excellence in cloud computing and serverless architecture. Leading various projects: designing and building solution to synchronize user identities across multiple application on Diligent One platform, designing and building Notifications Service used across multiple applications at Diligent.

(under NDA) (Warsaw, Poland)

Tech Lead, Sep 2019 to Nov 2022

The name of the project and name of the client is under NDA. But I can say that it is one of the biggest known GRC software.

My responsibilities in this project: maintaining a few Ruby on Rails applications, developing new features in these applications, splitting these monolithic apps to small microservices, monitoring performance of apps, etc. Plus, as a tech lead I had following responsibilities: leading a team of 15 developers, architectural design, planning new features, weekly calls with client's R&D team. Another important part of my work here: interviewing (20+ interviews) and mentoring.

I work here as part of a team of 15 developers. Additionally, there was a huge R&D team on the client side (150+ developers). There is a lot of communication and collaboration with them.

Keywords: AWS (ECS, EC2, CloudWatch, IAM, Lambda, S3, RDS, CodePipeline + CodeBuild, API Gateway, SQS, SNS, EventBridge, DynamoDB, SSM Parameter Store), Terraform, TypeScript (for microservices and front-end), Ruby on Rails, React.js

Flatstack LLC (Kazan, Russia)

Lead Frontend Developer, July 2017 to Aug 2019

I started there as Senior Frontend Developer. For all the time that I have been working in the company I participated in 9 projects (sometimes a couple of them at the same time).

My duties: direct communication with customers; training employees of the department in Frontend development; leadership in projects; participation in the recruitment and hiring processes; managing the Frontend Internships (trainer); supervising architecture, code and development process of projects; launching projects into production; reduction of technical debt, refactoring within the legacy projects.

Stack: React.js, Vue.js, Angular, sometimes Ruby On Rails (Asset Pipeline, SLIM/HAML) + SCSS + jQuery.

Web-programming courses for children (Kazan Federal University and Innopolis lyceum)

Teacher, 2015 to 2016

The administration of the university invited me to become a teacher of web-programming courses for children. A high level of expertise was required (to make sure that I share reliable knowledge). It was a series of 10 workshops about HTML+CSS+PHP at the University and the same ones at Innopolis lyceum.

Long term side project – GoldKamea

Full Stack Developer, 2013 to present

gold-kamea.ru — an online store made for Russian wholesaler of jewelry equipment and tools.

This project demonstrates most of my skills as a Full Stack engineer and ability to design, plan, develop, manage, deliver and maintain by oneself.

This project was started as a small freelance job. The first version was written by me in PHP (Phalcon framework) in 2013. This version had been in use for 5 years and was profitable. The project was supported by me during these years: hosting, resolving issues, and a lot of improvements.

In 2018 the development of a new version started. The new version was released in Feb 2019. Some keywords about new version: React, Server-Side Rendering, GraphQL, Apollo Server + React Apollo, styled-components, Prisma, PostgreSQL, Redis, Node.js, Docker, Kubernetes, Self-hosted, CI/CD, Sentry.

It was not only tech work. There were a lot of business aspects: understanding end-user needs, SEO, social networks management (Instagram, etc.), direct communication with customers, etc.

Family projects

Full Stack Developer 2010 to 2018

I was involved in a number of projects created by an agency founded by my father. There were 2 big projects: agrimart.ru (Phalcon PHP Framework, MySQL, NodeJS, socket.io, React) and mirstroek.ru (plain PHP, MariaDB). In 2017 I started building a uniform platform for these projects, because 2 projects have a lot of commons. New platform is based on microservice architecture using Node.JS, PostgreSQL, RabbitMQ, Elasticsearch, Docker, React (Redux, SSR). Currently, development is suspended.

My own projects

PHP Developer, 2011 to 2014

That was a time when I was thinking about launching a startup. There were many attempts: food delivery service, bicycle rental service, etc. All of it was created with PHP: Kohana Framework, Yii.

Small sites for small business

Web Developer, 2009 to 2016

This was my first developer experience. I made around 10 sites using Wordpress, Joomla, custom PHP CMS and later with Ruby On Rails. Most of the sites are not active today.

A list of technologies I had experience with

TL;DR

Started as a PHP developer in 2009, later switched to Node.js and frontend technologies (such as React). In parallel finished a few projects with Ruby on Rails, Go. I have been learning Java at university. Slightly familiar with low-level programming with C/C++. Lately focused on clouds (AWS) and serverless solutions.

Backend

Common concepts: patterns, REST, 12 factor apps, Domain-Driven Design, OSI model, CORS, familiar with common web-application vulnerabilities

Node.JS (**7+ years of commercial experience**): Fastify, Prisma, Express, Knex, Bookshelf, Socket.IO, Node.JS core library (streams, cluster, file system, net, etc.), experience of implementing Node.JS services for microservice architecture and serverless.

Microservices: CQRS, Event-Sourcing, API Gateway, backend for frontend, deployment, familiar with profile literature, [bachelor thesis on this topic](#)

PHP 4+: CodeIgniter, Yii 2, Kohana, Phalcon, Composer

Ruby on Rails (**~4 years of commercial experience**): Rspec, upgrading Rails from 4 to 5, and from 5 to 6.

Go: haven't experience with web-related things in Go, but have experience in implementing web-crawler and implementing various algorithms for "Theory of Information and Coding" discipline in university

Java 8+ (basic level): OOP, Spring Boot, Tomcat, Jetty, Hibernate, JPA

PostgreSQL, MySQL, Redis, RabbitMQ, Elasticsearch, MongoDB

Infrastructure

AWS: **3 year experience**, ECS, EC2, CloudWatch, IAM, Lambda, S3, RDS, CodePipeline + CodeBuild, API Gateway, SQS, SNS, EventBridge, DynamoDB, SSM Parameter Store

Terraform, tfsec, Terraform workspaces

Reverse Proxy / Load Balancing: Nginx, HAProxy, Traefik

Linux (administrator level, **10 years of using it as my daily driver**): Fedora CoreOS, Ubuntu, Debian, CentOS

Docker and related things: Docker Compose, Kubernetes (setting up and managing one production cluster for my own projects and projects of my customers (as a freelancer)), Rancher, Docker Swarm

Bash scripting

Frontend

ECMAScript 2017+ (stage-0)

React: **7 years of commercial experience**, SSR (from scratch), Hooks, React Router, styled-components, react-helmet, code-splitting, Next.js, HMR, context API, react-apollo, Redux, Redux-Saga, etc.

Backend integration: GraphQL, REST API, Web-Sockets (socket.io)

Tools: NPM, Yarn, npx, Gulp, Webpack, nodemon, ESLint, Prettier, Babel

Angular 2+: **1 year of commercial experience**

Vue.js: **1 year of commercial experience**

Styling: CSS, SASS, LESS, PostCSS, CSS-in-JS

Semantic markup and accessibility

Jest, Enzyme, Cypress.io, Ava

TypeScript: **5 years of commercial experience**

Static Site Generators: Hexo, Gatsby, middleman

Familiar with basic UI/UX concepts

Common things

GIT, TDD, CI/CD

Hobbies and interests

- I really love IT. I have a small channel in Telegram where I write about my experience with different things: https://t.me/my_it_discoveries. Sometimes I write articles like this: <https://medium.flatstack.com/landing-page-with-react-38-kb-of-js-100-100-performance-score-in-lighthouse-1dc798533c0b>
- Gaming (good old PC gaming).
- Digital privacy.