



# Mikhail Bakulin

SOFTWARE ENGINEER, BACKEND DEVELOPER



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## About

I'm very passionate about my work. I have positive response to any ideas and I know how to work in a team, how to convey my point of view calmly and reasonably. I write clean and concise code and I love well-written documentation. At work I prefer to show healthy perfectionism and attention to details, as work consists of many small things. I'm eager to learn a new technology if it appropriate for the task.

I have a desire to apply my skills in the best way and for me, it means to have a greater influence and to enrich other's lives. Not only because it makes me feel better about myself, but also because it's a great opportunity for solving new and challenging puzzles, which is always exciting.

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## IT skills

### PHP

5 years

- Frameworks: Symfony 4, Yii2
- Version control system: Git (Git flow)
- Testing: Codeception, Selenium, PHPUnit, Mockery
- SOLID, KISS, DRY
- PSR

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### Go

1 year

- Microservice architecture
- Frameworks: Echo, go-micro
- Package manager: Glide

## Databases

- Relational: PostgreSQL, MySQL
  - Document-oriented: MongoDB
  - Search engines: Elasticsearch
  - Key-value: Redis, Memcached
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## DevOps

Local environment setup: Docker + Docker-compose

Orchestration: Kubernetes

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## Message oriented middleware

RabbitMQ, NATS, mangos(nanomsg)

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## Javascript

NodeJS, ReactJS, Webpack, ES6

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## Html5 & Css3

Responsive Web Development, HTML5 Boilerplate, SASS, SEO, Bootstrap

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## Misc

Python, XDebug, BlackFire, Arch Linux, Z shell, PhpStorm

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## Relevant experience

July 2017 - present

### Senior backend developer

admitad GmbH

- Got familiar with Golang in a short period of time
  - Involvement in a broad variety of tasks from architecture to deployment
  - Software design using microservice architecture
  - Documentation of code styles and best practices for newcomers and creation of local development environment setup using Docker
  - Development using Scrum methodology
  - Code review
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September 2016 - July 2017

### Senior backend developer

TASS

- Involvement in the design and creation of new company applications using a service-oriented approach
  - Support and refactoring code of the legacy app(up to 600rps)
  - Development of a company webservice based on the Yii2 framework
  - Documenting technical solutions in Confluence
  - Organizing meetups for colleagues to share knowledge and help to learn new technologies
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September 2014 - September 2016

### Full-stack developer (middle)

Informika

- Development of web-applications and services based on the Symfony framework
  - Participation in the discussions on the project architecture
  - Refactoring of problem areas
  - Writing project documentation
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March 2012 - September 2014

### Leading Information Systems Engineer

Institute for Spectroscopy RAS

- Development and refactoring code for official ISAN website
  - Writing scripts for parsing data about employees and scientific publications from plain text
  - Configuring and administering ISAN network hardware
  - Ensuring the operability of the local network
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June 2009 - March 2012

### Engineer OMOI, Junior Researcher

Troitsk Institute for Innovation and Fusion Research (TRINITI),

Full time postgraduate study

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## Projects

### Admitad Widgets

- Widgets is a kind of advertisement with real-time pricing on goods from partner marketplaces
  - The core of application was written in Go and optimized for a high performance, widget constructor and partner accounts was built using Symfony
  - All technologies and tools for the specific needs of the application requirements was picked during process of analyzing and benchmarking Open Source solutions that are available on the market
  - Product list is formed dynamically based on location of the user and contents of the page that contains widget
  - Advertisers have the ability to limit and direct ad-traffic the way they need
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### TASS Terminal

- News selling and distributing system
- Real-time app for TASS news feed subscribers
- Decoupled system, frontend uses backends API to authenticate user and gather data
- Backend using messaging queue to perform heavy tasks, like adding new material to search index, auto categorization and tagging
- Allowed delay after news have been published is about two seconds
- User receive all updates through messaging queue and websocket (NodeJS)

- Backend on Yii2 framework, frontend on ReactJS
  - API using JSON-RPC with RAML specification
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## RESH

- Federal project providing free online courses for students
  - Creating a service for lessons publisher
  - Lesson is uploaded as an archive, then it gets unpacked, video gets transcoded and prepared for streaming
  - Creating a service for video transcoding based on ffmpeg
  - Extracting the structured information about the tests(XML, IMS QTI), contained in the lesson, building a data model based on that data
  - Currently on aprobation in region schools
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## Photobank

- Stock photos of the Russian Geographical Society
  - Designing a data model for the service of loading and storing photos
  - Asynchronous processing of photos in queues (RabbitMQ)
  - Defining programmatically the main palette of a photo, comparing photos, searching duplicates
  - Frontend: development of drag'n'drop plugin, autoload scroll and slider
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## window.edu.ru

- Huge database of educational resources for students and teachers
  - Migrating to Symfony2
  - Caching and query optimization
  - Full-text search using Elasticsearch
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## Language

### English

C1

IELTS Overall Band Score 7.0 - Speaking 7.5 Listening 7.5 Reading 7.0 Writing 6.0 (2017)

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### Russian

Native speaker

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## Education

### National Research Nuclear University MEPhI

Engineer-physicist, specialty "Physics of kinetic phenomena"

2003-2009

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