



Sergey Zhukov

FULL-STACK JAVA DEVELOPER · SENIOR DESKTOP DEVELOPER

Saint Petersburg, Russia

☎ (+7) 911-226-4992 | ✉ zhukovsd@gmail.com | 💻 zhukovsd | 📧 zhukovsd@gmail.com

Education

ITMO State University

B.S. IN INFORMATION SYSTEMS AND TECHNOLOGIES

Saint Petersburg, Russia

2007 - 2012

Skills

Programming languages Java, Javascript, Delphi, C++
Web ES6, HTML5, LESS, Bootstrap
Databases MySQL, MSSQL, SQLite, MongoDB
DevOps Docker, Docker Swarm, Jenkins, Travis CI, GitLab CI, Circle CI, Bash

Experience

iTVA

SENIOR DESKTOP DEVELOPER

Saint Petersburg, Russia

2010 - 2017

- Lead developer on a number of projects:
 - Native Windows applications
 - Cross-platform applications for Windows and MacOS
 - Web services
 - Libraries for internal usage within a team (internationalization library, persistent settings library)
- Was responsible for development and release of more than 10 software products
- Used technologies:
 - Programming languages: Delphi, C++, Javascript
 - UI frameworks: VCL, Firemonkey, Skinbuilder, Sciter, CEF
 - Libraries and databases: libtorrent, bass, MySQL, FireDAC, SQLite

Upwork

FREELANCER

Remote

2016 - present

- Profile - <https://www.upwork.com/freelancers/01fe466a51a96a2b6a>
- Average project rating - 5.00/5.00
- 20 jobs in different areas:
 - Java
 - Javascript/jQuery
 - Windows and MacOS installers
 - Various desktop projects: launcher and installer for MMO game, custom Chromium build, visual components for Delphi VCL

VBrand

FULL-STACK JAVA DEVELOPER

Remote

Mar. 2017 - May 2017

- Implemented a screen capturing system (PowerShell, FFmpeg)
- Implemented a client-server application for video processing (cutting/merging/converting). RESTful API; Backend - Java, FFmpeg; Frontend - Javascript, Bootstrap, jQuery

Code Partners

SENIOR FULL-STACK DEVELOPER

Remote

June 2017 - present

- Various outsourcing project mostly involving C++ and Delphi
- Architecting project ecosystem which involves building a stack of microservices with Docker and Docker Swarm. Prototyping project components - Jenkins plugin (Java), OAuth2 provider, PHP-based REST API. Deployment workflow (staging and production environments), automated tested implemented with Jenkins pipelines.

Self-motivated projects

Maze generator

[GitHub project](#)

JAVA, GRAPH THEORY, SERVLET API

2015 - 2016

- [Web application - http://zhukovsd.github.io/maze-generator/](http://zhukovsd.github.io/maze-generator/)
- Algorithm works with planar graphs, which allows building mazes of arbitrary shape
- Finished generator was used during the implementation of maze solving Android game

Multiplayer minesweeper on infinite grid

[GitHub project](#)

JAVA, MONGODB, CONCURRENCY, WEB SOCKETS, HTML5

2016

- [Web application - http://5.101.123.222:8080/online-minesweeper/](http://5.101.123.222:8080/online-minesweeper/)
- Backend - JavaEE application, Frontend - HTML5/JS/Canvas, communication protocols - HTTP, WebSocket
- The grid is conventionally infinite and lazy-generated. A single unit is a chunk - an area of NxM cells
- A chunk is a unit of every internal interaction within the application:
 - Cells fetching from DB happens by indexed chunkID field
 - Fine-grained locking mechanism locks the field by chunks
 - Field area requesting by clients

Typing test

[GitHub project](#)

KOTLIN, SPRING, ES6, PUGJS, WEBPACK, CIRCLECI, DOCKER SWARM

2016

- Web application - <http://88.99.12.213/>
- A simple 1-minute typing speed test with frontend built with ES6/Pug.js. Each test result gets submitted to the backend (built with Kotlin/Spring) which responds with player's placement and stores typing speed characteristics (characters per minute, typos count) to the persistent Redis DB
- The app runs two microservices, the first one encapsulates Tomcat, which runs Spring application. The second microservice runs a Redis instance
- CircleCI pipeline builds the app (frontend with Webpack and backend with Maven) and deploys it to the remote Swarm cluster
- Full project overview is available on GitHub - [README.md](#)

Notable work projects

[Loviotvet.ru](#)

DELPHI

2010 - 2012

- Smart calculator for solving and simplifying math expressions and equations
- Self-implemented solving engine based on [reverse polish notation](#) builds a simplifications tree which allows displaying a solution in step-by-step fashion
- Supported math operations:
 - Common and decimal fraction operations
 - Polynomial operations including division
 - Solving linear and square equations
- A web service based on solving engine exposes RESTful API and serves requests from mobile clients and web application
- Freeware desktop, mobile and web clients were released for CIS market. Mobile clients have 500k+ installs, the service app served more than 12 millions of requests

An application for processing video content

JAVA, JAVASCRIPT, BOOTSTRAP

2017

- A client-server application for processing (cutting/merging/converting) video content. Typical usage is to create highlights clip from a show or to cut out ads from a broadcast record
- Architecture:
 - Backend - Java, FFmpeg
 - Frontend - Javascript, Bootstrap, jQuery
- Backend service exposes RESTful API which serves requests from web app UI views
- Supported video sources:
 - Direct URL
 - Torrent file
 - Youtube video URL