

# Alexey Zykov computer science engineer

Date of birth: 07.07.1989 Birthplace: Moscow, Russia Residence: St. Petersburg, Russia

Nationality: Russian

# **Contacts**

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# Spoken Languages

Russian - nativeEnglish - fluentItalian - fluent

15 years in software development. Now working in freelance. Interested in distributed multi-platform applications and data analysis. Worked with different technologies and tend to learn more.

tudies

2010 - 2014 Politecnico di Milano (Como, Italy)

Master of Science Department: Computer Science Engineering

Specialization: Data analysis

2006 - 2011 Moscow University of Radioengineering (Moscow, Russia)

Specialization: Digital electronics, computer systems and networks

02.2016 Lightbend certification: fast-track to Scala

11.2012 - 12.2013 RSR Srl (<u>www.rsr.it</u>) (Como, Italy)

Fixed term Company Activities: Embedded systems development

Job Title: Software engineer

Duties: Development of firmware for microcontrollers and mobile prototypes for wireless communication

04.2014 - 09.2015 **Totup** (<u>www.totup.com</u>) (remote)

Remote Company Activities: Web bookmaker (startup)

Job Title: Senior web developer

Duties: Back-end development in Java for Play/Akka server partially front-end in JavaScript

12.2015 - 04.2018 Advanced Technology Solutions (www.atscom.it) (Milan, Italy)

Permanent Company Activities: Software development in banking systems

Job Title: Software engineer

Duties: Versatile developer involved in any new activity company does including web, mobile and big

data.

04.2018 - current Freelance (remote)

Duties: Taking software projects on my own management, developing from scratch or interact with other

freelancers

**Programming** 

Swift | Objective-C | Kotlin | Scala | Java | JavaScript | SQL | C

**Operation systems** 

Linux

**Databases** 

PostgreSQL | MongoDB | Redis | ORM

Platforms and frameworks

iOS | Android | Apple Watch | Micro-Service Architecture | Akka | Apache Spark | Play framework | Node JS | React JS | Angular JS

Occupation

05.2020 - current Top-5 music app in App Store

→ Yandex.MediaServices (Russia)

Technologies used: iOS, Objective-C, CI/CD for iOS apps, UI testing

*Role:* Senior iOS developer, business unit lead. Participated a high-load mobile product with 25+ millions subscribers. Created new section of the app. (http://music.yandex.ru)

09.2019 - 05.2020 iOS app for staff training

→ ServiceGuru (Russia)

Technologies used: iOS, Objective-C

*Role:* Lead developer for iOS platform. Solved performance issues of an old iOS app, renewed application architecture. (https://apps.apple.com/us/app/serviceguru/id893089809)

08.2019 - 08.2019 iOS app for karaoke contest and video broadcast streaming

→ VoltMobi Labs (Russia)

Technologies used: iOS, Swift

Role: Created a karaoke contest platform for the national scale event. (https://apps.apple.com/ru/app/день-гимна/id1476256219)

# 03.2019 - 07.2019 Native mobile applications in advertising

→ MobX Agency (Russia)

Technologies used: iOS, Swift, Android, Kotlin, PHP, Linux

Role: Created native mobile apps on my own for marketing agency both Android and iOS platforms. Set up In-App purchases with backend implementation. (https://itunes.apple.com/us/app/astrostar-гороскоп-и-сонник/id1454339618) (https://play.google.com/store/apps/details? id=agency.mobx.astrostar)

# 08.2018 - 03.2019 Cashier integrations for gambling platform

→ InBet (Russia)

Technologies used: Kotlin, Undertow Server, API integration

*Role:* As a backend developer in a team of four integrated about 10 different payment systems from all over the world for existing web project.

04.2018 - 08.2018 Social network for bikers

→ MotoTeamRussia

Technologies used: Scala, Akka HTTP, PostgreSQL, Minio

*Role:* As a backend developer in a team of two moved an existing project from a raw state to public production. Configured DevOps routines. (http://mototeamrussia.com)

04.2017 - 04.2018 Modern micro service backend for a national payment system

→ SIA (Italy)

Technologies used: Scala, Akka, Lightbend Telemetry, Elastic Search, Docker

*Role:* In a small team designed micro service architecture based on Akka to port an existing legacy Java monolith. Then in a team of ten rewrited a code base from Java to Scala. Worked with Lightbend suite for Akka monitoring with Elastic Search on board.

# 11.2016 - 04.2017 Set of mobile applications for retail loyalty with computer vision

→ SIA (Italy)

Technologies used: Swift, iOS, Java, Android, Computer Vision

*Role*: Developed a native iOS application based on defined API that uses camera for receipt recognition. Also did partial support for an Android platform. (https://itunes.apple.com/it/app/ti-frutta/id634990347)

04.2016 - 09.2016 Cluster application for multinational bank clients classification

→ UniCredit Business Integrated Solutions (Italy)

Technologies used: Scala, Apache Spark

*Role*: Peer scala Spark developer for well defined and documented machine learning problem. Was solving different problems of memory optimization and overall performance of cluster application.

#### 12.2015 - 03.2016 Web portal for fraud monitoring in bank environment

■ BPER group (Italy)

*Technologies used*: Scala, Play Framework, MongoDB, Reactive Mongo, JavaScript, jQuery *Role*: Lead full stack web developer second after project lead. Designed and developed front-end and back-end of the service based on the documentation.

#### 10.2015 - 11.2015 Apple Watch / iPhone prototype for trading on stocks exchange

→ T.P.L. Electronics (Italy)

Technologies used: iOS, Objective-C

*Role*: Implemented whole project that was proof of work prototype. Did experiments with minimum gestures recognition on smartwatch.

# 04.2014 - 09.2015 New generation web sport totalizator

→ Totup (Russia)

*Technologies used*: Play framework for Java, JavaScript, JQuery, Twitter Bootstrap *Role*: Lead full stack web developer second after CTO in a team of 5 people. Also prepared tasks for Junior developers. Designed different services including player ratings system and fraud detection.

### 07.2013 - 02.2014 Wearable system prototype for health monitoring

→ Master thesis in Politecnico di Milano (Italy)

Technologies used: TI CC2540 system on chip, C, iOS, Bluetooth Low Energy, MEAN stack

#### 02.2013 - 12.2013 **IoT module for home automation**

→ RSR Srl (Italy)

*Technologies used*: TI MSP430, C language, MQTT protocol, Bluetooth Low Energy, iOS *Role*: Embedded system developer. Starting from ready PCB board adopted drivers of wireless Wi-Fi and Bluetooth Low Energy chips for TI MSP430 microcontroller. Then implemented a high level network protocol on top. After developed mobile prototype for iPhone to talk with the board.

#### 08.2012 - 02.2013 "Shortcut vision" augmented reality application prototype

→ Politecnico di Milano (Italy)

Technologies used: Computer vision, OpenCV, Android

*Role*: Invented an algorithm for image recognition of physical keyboard of Mac computers and implemented it with augmented reality system prototype on Android phone based on OpenCV library.

#### 2009 - 2011 Report system for university automation

➡ Specialist thesis in Moscow University of Radioengineering (Russia)

Technologies used: Java SE, Java ME