



# Dmitry Rybakov

## Swift/ObjectiveC/C++ Software Engineer

### PROFILE:

Having overall more than fifteen years of working experience as Swift/ObjectiveC/C++ developer. Expertise in iOS, Client-Server applications, Xcode, MDM providers, Peer to Peer video/audio transmitting. Skills in managing multiple tasks, as a self-motivated and a strong team player with good communication abilities. Begin in the know of industry best practices and technologies and having experience in conducting projects from the scratch to the production. I also have experience working in the international teams on different projects. Additionally I have several home projects and one commercial open source <https://cocoapods.org/pods/BPMobileMessaging> references that you can find in my CV. In my free time I started to learn Android/Kotlin.

Married and have one child.

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### CAREER HISTORY:

#### Senior Software Engineer | Bosch (<https://www.bosch-ebike.com>)

05.2017 – present

This project enables the user to synchronize and to change a wide range of settings on an electrical bike on-board computer such as activities, personal information, connections settings, map downloads. Using this app the user has access to the dashboard, activities, map and navigation. Also it allows you to flash the bike hardware using a connection over Bluetooth.

AppStore links: <https://itunes.apple.com/cz/app/bosch-ebike-connect/id883596487?mt=8>

#### Responsibilities and Key Accomplishments

- Working in a distributed team. Team size is approx. 15 people
- Communicating with other departments
- Taking a part in design process of the whole feature
- Owning and implementing essential features like transferring updates from the backend to the bike or one of the various bike settings configuration screens
- Writing unit tests
- Following best practices/guidelines and code reviewing as a must have step before deploying to the master branch
- Actively taking a part in a community of practices where you will discuss the best ways to drive the developing process and practical aspects

#### Technologies, frameworks and libraries

Libraries/frameworks used in this project were the following: Swift, Combine, UIKit, AES/RSA encryption of the personal data, Keychain on the mobile Device, Firebase for analytics, CoreData, Mock library for Unit tests, UI

automation.

## **Senior Software Engineer | Breezy (<http://www.breezy.com>)**

01.2016 – 04.2017

This project enables secure mobile printing from any device to any printer, while getting rid of all the hassle that accompanies printing in everyday life. It is available on both mobile platforms - iOS and Android. Besides the simplified and easy to use UI it includes integration with the almost all commonly used MDM providers and cloud services which allows it to be easily integrated into the customer environment.

AppStore links: <https://itunes.apple.com/us/app/breezy-2/id943573373?mt=8>

### **Responsibilities and Key Accomplishments**

- Cleaning up the repo and optimizing its size;
- Implementation of new UI features;
- MDM providers and cloud services integration
- Supporting the code in ObjectiveC and implementation the new features in Swift;
- Bug fixing, code reviewing;
- Supporting the continuous integration based on CircleCI service;
- Communication with the customers and providing the support in solving the tech issues;
- Deploying the app to the AppStore
- Collaboration with the Product Owner and communication with the customers;

### **Technologies, frameworks and libraries**

Libraries used in this project were the following: AES/RSA encryption of the personal data, Using Keychain on the mobile Device, OAuth with two phase authentication, Mobile Data Management frameworks (Good/Citrix/MobileIron/AirWatch), Swift/ObjectiveC, App Extension, CircleCI, CoreData, cloud services SDKs, Mock library for Unit tests, UI automation.

## **Senior Software Engineer | Waverley (<http://www.waverleysoftware.com>)**

04.2015 – 01.2016

Project Mobile Demo BrightPattern. Mobile application for messaging and audio/video calls for call centers. This application might be used in two different ways. The managers of call centers can use this application to control groups of operators and operations can use this application to stay online and respond to customers requests with an event if they are out of the office. Cocoapods link: <https://cocoapods.org/pods/BPMobileMessaging>

### **Responsibilities and Key Accomplishments**

- Optimizing the size of the repo and removing odd references;
- Reviewing and implementation of the new UI features/improvements in Swift;
- Bug fixing, code reviewing;
- Collaboration with Product Owner and team members on customer side;

### **Technologies, frameworks and libraries**

OAuth with two phase authentication, Peer to Peer Voice/Data based on WebRTC, ObjectiveC/Swift, CoreData, Mock library for Unit test, UI automation.

## **Lead Software Engineer | Sweetsoft (<http://sweetsoft.com>)**

01.2015 – 04.2015

Project Health Gorilla. Healthcare marketplace to connect all doctors and clinicians with over 9000 diagnostic labs and radiology centers. With this app doctors can share information between each other. The App store link is <https://itunes.apple.com/us/app/health-gorilla/id924846053?mt=8>

### **Responsibilities and Key Accomplishments**

- Implementation of new features like drop-down calendar in property view;

- Code-review process was introduced;
- Collaborating with team members and product owner from US;

### **Technologies, frameworks and libraries**

ObjectiveC, MRC memory management, AFNetworking, OCMock for unit testing, JSONModel, RBSproyboardLink and others.

### **Senior Software Engineer | Sweetsoft (<http://sweetsoft.com>)**

04.2013 – 04.2015

Project Mobile Prognoz Platform. Provide visual data analysis using a wide variety of visual tools (map charting, line charting, bubble charting, tree map charting). The goal of this application is to show slices from an analytic database with multiple dimensions. Through the UI you can open(download) databases on the server and view different representations of the data by choosing one of the charts and marking items at the dimensions. This application is designed for analytic engineers or managers that can make decisions easily.

App Store: <https://itunes.apple.com/us/app/prognoz-platform-mobile/id543549882?mt=8>

### **Responsibilities and Key Accomplishments**

- Developing code in C++/ObjectiveC;
- Bug fixing, code reviewing, coaching;
- Collaborating with more than 10-members of the international software team.

### **Technologies, frameworks and libraries**

ObjectiveC, MRC memory management, performance and memory instruments in Xcode, Object oriented design in C++, Core Networking, OpenGL ES

### **Home project**

Simple touch (home project) Link to publication on <http://habrahabr.ru/post/256143> IT geeks resource.

This home project resides on bitbucket.org and consists of hardware and software parts. The hardware parts are Kinect, Cubieboard (single board computer) and projector. The software part is an Android native application which is written in c++. The goal of this project is to create a virtual touchable area on very different kinds of surfaces. The magic part of this project is that touch events are injected to the driver level. This means that any Android application from PlayStore can handle user's gestures on the surface.

### **Responsibilities and Key Accomplishments**

- Software optimization to achieve higher FPS and responsiveness;
- Able to debug native C++ code using Eclipse IDE;
- Implementation of self-tuning algorithm at the target rectangle on the surface based on markers(in progress);
- Project was designed from the scratch both software part and hardware one;

### **Technologies, frameworks and libraries**

libfreenect, opencv, NDK, libUSB and also the custom build of Android OS for Cubieboard was created

### **Home project**

Human pose estimation on the image. ML based project on iOS platform.

[rdv0011/pose: Estimates a human pose on an image.](#)

### **Technologies, frameworks and libraries**

CoreML, Vision, Swift

### **Software Engineer | Quickoffice(Google) <http://quickoffice.com>**

02.2010 – 04.2013

Quickoffice is a proprietary productivity suite for mobile devices which allows users to view, create and edit text

files, presentations and spreadsheets. It consists of QuickWord (word processor), QuickSheet (spreadsheet) and QuickPoint (presentation program). The programs are compatible with Microsoft Office file format, but not with the OpenDocument standard. Latest versions also support integration with cloud technologies that help to share documents and organize documents workflow in the company.

### **Responsibilities and Key Accomplishments**

- Requirement analysis and finalization;
- Performance optimization using tool from instruments;
- Implementation a variety of UI controls for example showing thumbnails in filmstrip like manner with background processing and fast UI response;
- Fix memory leaks;
- Continuous integration based on Bamboo;
- Collaborated with a 10-member software team.

### **Technologies, frameworks and libraries**

C++, XML, Eclipse, Xcode, Windows 7, iOS, Instruments to investigate issues with memory and performance

Before that I was working in several companies including EPAM <https://www.epam.com/>, Ciklum <https://www.ciklum.com/>, <https://www.iskratel.com/en/> with 6 years of experience in total on the following projects:

[https://en.wikipedia.org/wiki/Oracle\\_Hyperion](https://en.wikipedia.org/wiki/Oracle_Hyperion)

<https://www.linkedin.com/company/datakomm-as/about/>

### **EDUCATION:**

**National Technical University KPI**

1998 - 2004

Specialist of "applied mathematics"

### **PROFESSIONAL DEVELOPMENT:**

Continuous learning of new trends in IT technologies like Swift language or Combine framework. Strong skills in object oriented design. to make code more structural and easy to support. Communication skills and agile development process to increase productivity. To be an expert in both native platforms I started to learn Android/Kotlin.

### **INTERESTS:**

Action sports like skiing, cycling. Hobby electronics DIY. I have several home DIY projects and articles on a geek resource: <https://habr.com/en/post/458000/> and <http://habrahabr.ru/post/256143>