**STANISLAV PERCHENKO – Software Development Engineer**

Ukraine, Kharkiv. **Phone:** +38-050-663-75-52, **e-mail:** sperchenko@gmail.com

**Age:** 33

**Purpose:** Position of ***Android software developer***.

**Technology summary:**

* Programming languages: Java ME/SE, C, Assembler (AVR)
* Frameworks: Android SDK/Support library, SQLite, ORMLite, REST API, Bluetooth, NFC, GPS, Sensors (accelerometers, gyroscopes)
* Tools: Android Studio, Eclipse IDE+ADT, NetBeans IDE for Java ME, Embedded workbench for AVR/ARM, Atmel AVR studio 4
* CVS/Bugtrackers: GIT, SVN, Redmine, JIIRA
* Google Play Services: GCM, OAuth2 REST API, Drive REST API
* Data formats/protocols: JSON (native and GSON), SQL/DOM, TCP/IP, Java sockets, BLE/iBeacon, MPEG4 container, WAV/PCM audio format, NMEA0183.
* 3-d party SDKs/libraries: Estimote iBeacon SDK, Kontakt-IO iBeacon SDK, Indoo.rs SDK (indoor navigation), Mapsforge (OSM maps renderer), graphhopper (routing library), SoundTouch (native C-written audio processing library)

**Professional summary:**

* English – upper intermediate. IELTS test was set in summer 2015, overall score 7.0.
* Object oriented programming & design
* Mobile applications architecture design & developing (including embedded applications)
* Android UI/UX design, layouts developing
* Database architecture design and development for mobile applications.
* Digital signal processing and other computation algorithms implementation
* Wide experience of code re-engineering and optimization by structure and performance.

**Education:**

1999 – 2004 Kharkiv national university IV level of radioelectronics. ***Specialty - «Information Networks of Telecommunication»***

2003 - Bachelor’s degree with honor.

2004 - Master’s degree with honor.

2004 – 31.10.2007 Postgraduate courses in Kharkiv national university IV level of radioelectronics.

***Specialty 05.12.13 «Radioelectronic devices and means of telecommunication».***

**Work Experience**

January 2013 – Present SSA Group, Kharkiv, Ukraine

**Contract Android software developer**

**Project name: “Mobile Security Patrols”**

**Project duration:** January 2013 – May 2013

**Role:** Android developer

**Team:** 3 total (local team), 1 android.

A security companies automation system for our customer from Australia (Combined Security Solutions).I developed the Android client for the system which, on a daily basis, provided mobile patrols with routs, schedules and the set of sites which must be checked. The application provided physical control of security patrols’ performance by tracking GPS location and reading NFC tags on sites and uploaded reports on the backend

* PERSONAL RESPONSIBILITIES
* Developed application’s core functionality: data structures, DB storing, network interaction, GPS position, NFC functionality
* UI design & development, layouts development
* Designed & developed business-logic of the application
* TECHNOLOGIES USED
* Android SDK, Widgets customization, XML Layouts
* SQLite (Android native API)
* REST API, JSON, GPS, NFC
* SVN

**Project name: “Cinemagram”**

**Project duration:** April 2013 – September 2013

**Role:** Android developer

**Team:** 6 total (international remote team), 3 for android client developing

An Android client application for the perspective social network called Cinemagram, which allowed user to create and share of short video records with different video and audio effects applied. This client also provided all common social features like “likes”, “reposts”, “comments” and so on. My part of job was to implement the part of program which was responsible for interaction with users (activities, fragments, layouts, business-logic), which is based on core functionality developed by the abroad part of team. I also made investigations and implemented sound effects for recorded movies. On this project me and 1 of my colleagues worked as a part of international team and were supervised by the team leader from abroad.

* PERSONAL RESPONSIBILITIES
* Developed application’s UI functionality (content presentation, content recording, social-specific functionality)
* Applying sound-effects to recorded video
* Reporting to the remote team leader (Canada) of this project.
* TECHNOLOGIES USED
* Android SDK, Widgets customization, XML Layouts, Animation
* Camera API, MPEG4 video transcoding
* JSON, GPS,
* GIT, JIIRA

**Project name: “HotelinPocket”**

**Project duration:** October 2013 – September 2014, January - February 2015

**Role:** Software architect / Android developer

**Team:** 6 total (local team), 1 for Android developing

Our company’s own project destined for hotels market. This is a generic application which purpose is to provide the user with the complete information about a hotel. The application has modules structure, which means that different kind of features are grouped into related modules which can be purchased by customers in any combination. The hotel-specific content for each module is downloaded from the backend. This project required comprehensive dealing with local database. Differential content update was implemented. I was the only developer of the Android client of this system, so I implemented this application from scratch and acted also as an architect.

* PERSONAL RESPONSIBILITIES
* Developing core application functionality
* Developing content presentation
* Participating into the process of creating application’s architecture and UI designing.
* TECHNOLOGIES USED
* Android SDK, XML Layouts, Animation
* Lots of widgets customization
* JSON, REST API SQLite, differential database update.
* SVN
* LINKS TO the PROJECT
* Project website: <http://www.hotelinpocket.com/>
* Final applications for hotels can be found in play market under the publisher name **“HotelinPocket”**

**Project name: “iBeacon-based indoor navigation framework”**

**Project duration:** September 2014 – October 2014

**Role:** Software architect / Android developer

**Team:** 1 only for the project

Our company’s own project which utilizes iBeacon technology for indoor navigation and to integrate beacons functionality to any other application. The purpose was to create manufacturer-independent SDK (like Estimote and KontaktIO) compatible with any iBeacon devices and also can provide applications with indoor navigation functionality. Within this project I implemented background service for acquiring beacons’ data, robust filtering algorithm, indoor localization algorithm based on trilateration method. Researches had been made on using Location Fingerprinting method for indoor navigation.

* PERSONAL RESPONSIBILITIES
* Researching of the modern techniques for indoor navigation
* Designing architecture of the SDK and developing it from scratch
* Developing demonstration application for indoor navigation
* TECHNOLOGIES USED
* Android Bluetooth API, Background services, BLE data parsing.
* Algorithms of robust signals filterin.
* Navigation algorithms (trilateration, location fingerprinting)
* Matrix algebra (base on Jama library).

**Project name: “Yo Safari NFC-based payment system”**

**Project duration:** October 2014 – January 2015

**Role:** Android developer

**Team:** 5 total (international remote team) / 1 for Android

The project of “Redskies technology” (a British company), which is intended to be an electronic payment system for public transport in Africa, based on Android devices using as terminals and NFC cards as e-wallets. I was a member of the international team developing Android part of the system. The project implied heavily usage of Bluetooth and NFC functionality as well as highly-reliable transaction-based data processing approach. Our company inherited this project already functional, but not well-developed. So my goal was to refactor and optimize the existed code and to develop the application further.

* PERSONAL RESPONSIBILITIES
* Initial refactoring of the application to optimize its architecture in Android-way.
* Product development, new features architecture analysis
* Working as a part of distributed team: India (server part), Honk-Kong (BT Hardware part), UK (customer & system architect)
* TECHNOLOGIES and KEY PROJECT FEATURES
* High intensive usage of background services for data synchronization with the remote server
* Highly reliable transaction based data transfer between devices and NFC cards was implemented
* Long-distance data transferring to NFC cards using Bluetooth-NFC hardware gateway was implemented
* SQLite for storing transaction data locally

**Project name: “Zemana antivirus for Android”**

**Project duration:** June 2015 – July 2015

**Role:** Software architect / Team leader / Android developer

**Team:** 2 total / 1 for Android

Stand-alone antivirus application for put customer from Turkey (Zemana Ltd.). My responsibility was to create the application from scratch on top of the scan engine and antivirus databases provided by the customer. I designed architecture and business-logic of the application, as well as UX, bases on customer’s proposals. I also acted as a team leader on this project, supervising the designer and interacting with customers. One of the key point of this project was the very tough time schedule. The developing process had been completed in 34 working days (310 hours including overtimes).

* PERSONAL RESPONSIBILITIES
* Interacting directly with the abroad customer, discussing application’s architecture and features, receiving feedback
* Tasks estimation
* Full range of product development
* TECHNOLOGIES USED
* Android SDK, Widgets customization, XML Layouts
* Highly sophisticated using of Android background services
* Intensive operations on file system
* SQLite, REST API (updating antivirus database from the customer’s backend)

2009 – December 2012 MiCON Systems Inc., Kharkiv

**Lead of Development Department**(equipment for remote monitoring of stationary and mobile objects).

* RESPONSIBILITIES:
* Developed architecture and protocols for remote monitoring systems with GPRS data transmission on remote server in real-time
* Designed & developed software for embedded remote monitoring devices, using J2ME technology
* Developed hardware part of electronic devices
* KEY PROJECTS
* Wireless GSM/GPGS cameras based on Motorola G24 GSM modules and OEM Camera modules with digital interface
* Vehicles monitoring devices (navigation, fuel control, remote images transmission), based on Motorola G24 GSM modules
* Remote photo monitoring and security system for Natural Gas pumping stations

2007 – 2008 MiCON Systems Inc., Kharkiv

**Ectronic engineer/microcontroller programmer.**

* RESPONSIBILITIES:
* Microcontroller programming for GSM monitoring systems.
* Schematic and PCB design of electronic devices.
* Documented remote monitoring equipment for serial production.
* KEY PROJECTS
* Real-time dispatch system for elevators based on GSM/GPRS data and voice transmission

2003 – 2005 Kozhedub Air Force University, Kharkiv

**Technician**

* RESPONSIBILITIES:
* Technical writing, digitized old textbooks, translation
* Worked on text composition before printing.

**Personal summary:**

* Highly motivated and self-driven software professional with strong ability to solve problems
* Used to write optimal and reusable code (performance optimization, power consumption optimization).
* High attention to make solutions in Android-way.
* Passion to explore and learn new technologies, including those which imply high mathematic requirements
* Working experience in application and improvement existed code.
* Ability to work independently and as a team member.
* Provided 24/7 support.