

# Miguel (Miquel) Beltran

Freelance Developer (Android, Flutter, ML)

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## Projects Portfolio

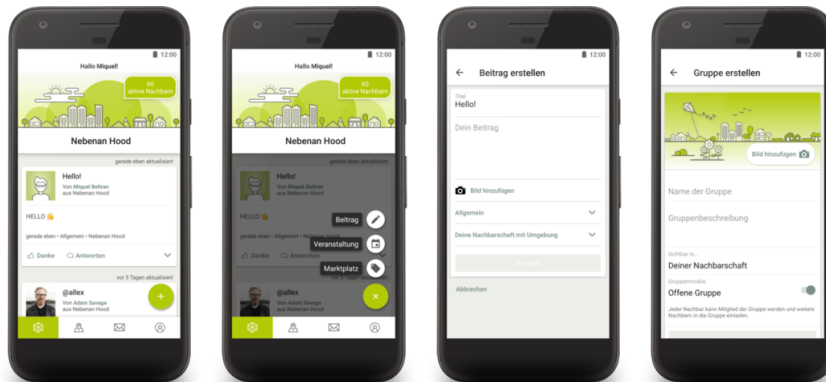
Updated: October 30, 2018

### Android

from 05/2016 to 11/2018 **Nebenan.de Android App**, Good Hood GmbH, Berlin, Germany.

Roles Lead Android Developer  
Languages Kotlin, Java  
Installs 500.000+  
Score 4.2 Stars  
Play Store <https://play.google.com/store/apps/details?id=de.nebenan.app>

- Social network app that connects neighbours, institutions and locals businesses.
- Developed initially in Java and then ported to Kotlin.
- Integration with Firebase Analytics, Facebook SDK and Firebase Notifications.
- Stack includes RxJava2, Dagger (later Koin), Retrofit, Mockito, RxBindings and Architecture Components including Room, ViewModel and LiveData.
- Good testing coverage with Espresso instrumentation tests and unit tests.
- Team composed of three developers. Me as lead and another two as junior developers.



from 06/2013 **VideoPlayer SDK Library**, *castLabs GmbH*, Berlin, Germany.  
to 12/2015

Roles Technical Lead, Software Developer  
Languages Java, C++  
Customers Wall-Mart (VUDU), Fullscreen.com, Mubi, Stan.com.au, Primetime  
URL <http://castlabs.com/products/video-player-sdk/>

- Design, development of a multiplatform modular Video Player library for Android.
- Main features include Adaptive Streaming playback with MPEG-DASH, HLS and Smooth Streaming, AVC(h264) and HEVC(H265) video decoding, surround audio support with DTS and Dolby technology and content protection with DRM using OMA and Widevine Modular.
- Common components of the player are developed in C++ and can be used on any platform including Android and iOS.
- This project uses **NDK (Native Development Kit)** and JNI (Java Native Interface) for the multiplatform components in Android.
- Android components **extended from Open Source Google's ExoPlayer**.
- Support from API 16 with MediaCodec API.
- Support from API 18 with MediaDrm API.
- Project organized with Agile methodology. Planned release cycle and continuous integration.
- It is now **used by top media player apps like VUDU** (5.000.000 Downloads).

from 03/2012 **Ultraviolet Android Player App**, *castLabs GmbH*, Berlin, Germany.  
to 10/2014

Roles Technical Lead, Software Developer  
Languages Java, C++  
Customers Play Store app, not released  
URL <http://castlabs.com/>

- Development of an Ultraviolet (uvvu.com) player for Android.
- Design and development of an Android native library in C++ capable of playing Common File Format movies with the Android OS player, with OMA DRM for rights management.
- App planned to be released to the market as the first Android "Common File Format" Ultraviolet player.
- Project pivoted into the VideoPlayer SDK Library.

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## iOS

from 06/2013 **VideoPlayer SDK Library**, *castLabs GmbH*, Berlin, Germany.  
to 12/2015

Roles Technical Lead, Software Developer  
Languages Objective-C, C++  
Customers Unreleased  
URL <http://castlabs.com/products/video-player-sdk/>

- Video Player library distributed as an iOS Framework.
- Features include Adaptive Streaming playback with MPEG-DASH, HLS and Smooth Streaming, AVC(h264) video decoding and content protection with DRM using OMA.
- Common components of the player are developed in C++ and can be used on any platform including Android and iOS.
- Player based on the **VideoToolbox.framework from iOS 8**.

from 01/2011 **Mobile Bank**, *Win Systems Solutions S.L.*, Barcelona, Spain.  
to 06/2011

Roles Software Developer  
Languages Objective-C  
Customers Casinos with Enterprise Distribution  
URL <http://www.winsystemsintl.com>

- iPod application with a magnetic card reader. Casino employees use the application to charge with credit the clients cards.
- The application reads the magnetic card client ID and connects to the casino system to obtain and display all client information, the casino employee can recharge the client card by introducing the credit amount and the personal PIN.
- Application developed using xcode and deployed internally using the Apple Developer Enterprise Program to the employees devices. The application features an internal version control and update system and also connects using secure sockets connection with certificates.

from 01/2011 **iStats**, *Win Systems Solutions S.L.*, Barcelona, Spain.  
to 06/2011

Roles Software Developer  
Languages Objective-C  
Customers Casinos with Enterprise Distribution  
URL <http://www.winsystemsintl.com>

- iPad application to view sales statistics from casinos with graphical data representation. The application connects to the casinos using a secure socket connection and allows to view statistics of sales in a daily/weekly/monthly basis.
- Application developed using xcode and deployed internally using the Apple Developer Enterprise Program to the employees devices. The application features an internal version control and update system and also connects using secure sockets connection with certificates.

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## Windows Platforms

from 06/2011 **Lottery Sales System**, *Win Systems Solutions S.L.*, Barcelona, Spain.  
to 10/2011

Roles Software Developer  
Languages C-Sharp, SQL  
Customers Bigaboom.ru  
URL <http://www.winsystemsintl.com/en/products/lottery-systems/lykos/>

- Development of the scanning and branding processes, featuring image recognition algorithms.
- Travel to Moscow for project delivery and on-site support.
- C-Sharp .Net application with Microsoft SQL Server.

from 01/2009 **Wigos**, *Win Systems Solutions S.L.*, Barcelona, Spain.  
to 12/2011

Roles Software Developer  
Languages C-Sharp, SQL  
Customers Casinos  
URL <http://www.winsystemsintl.com/productos/casino-managment-system/>

- Casino management and cashier software in Visual C-Sharp and Microsoft SQL Server.

from 01/2009 **Virtual Slot Games**, *Win Systems Solutions S.L.*, Barcelona, Spain.  
to 12/2011

Roles Software Developer  
Languages C  
Customers Casinos, video slot machine systems  
URL <http://www.winsystemsintl.com/en/products/wingames/>

- Development of virtual slot machine games in C.

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## Linux Platforms

from 08/2006 **Network Management System**, *W-Onesys S.L.*, Sant Cugat del Vallés, Spain.  
to 12/2008

Roles Software Developer  
Languages Java, C  
Customers Universitat Politecnica de Catalunya, i2cat  
URL <http://www.winsystemsintl.com/en/products/wingames/>

- Network management system for the optical network hardware developed by the company.
- The application features a client application developed with Eclipse Rich Client Platform (Eclipse RCP) in Java and a server application developed with JBoss and Enterprise Java Beans 3.0 and Hibernate technology.
- Embedded Linux components were developed using C.