

# Michelangelo ALTAMORE



*Self-motivated fast learner, enthusiast to tackle problems using appropriate tools, result-driven problem solver and proactive team player.*

## Mobile developer over Android and iOS platforms

### Quick facts

11 years experience  
10 mobile apps delivered  
6 apps running in production<sup>1</sup>  
~ 60k total users<sup>1</sup>  
~ 7.4k commits

<sup>1</sup> at the time of writing.

### Summary

I got a five-years Bachelor's degree in Computer Science in 2006. Since then I am working as a consultant for private corporations providing software development in fields such as telecommunications, mass retail and medical.

I currently work as senior iOS software developer for an agile team that adopts SCRUM methodology since early 2015, at TIM, the biggest Italian telecommunications company. I also have an extensive experience of the Android mobile platform. During my decennial career I've been involved in a wide range of software projects spanning from firmware to back-end development.

I am interested in the latest advancements of both statically typed programming languages (Kotlin, Java, Swift) and dynamic ones (Ruby, Javascript). I am experienced with different programming paradigms (Object Oriented/Functional) and methodological approaches as Reactive Programming (RxJava, RxSwift). I have also some knowledge about CI/CD (Jenkins, Artifactory, Maven, Gradle, Scripting, Puppet, Vagrant).

### Skills

*Programming paradigms:* Object Oriented, Functional

*Languages:* Kotlin, Java, Swift, Objective-C, C, Ruby, Javascript

*Platforms:* Android, iOS, MacOS X, Linux, Windows

*Remote API paradigms:* HTTP REST (JSON, XML), RPC (SOAP)

*Frameworks:* RxKotlin/RxJava, RxSwift/PromiseKit

*Specialties:* Android NDK JNI C/C++, NFC (HCE, RW, P2P), Bluetooth LE

*Version Control Systems:* Git, SVN

- Jan 2018 ○ Deliver a native iOS app supporting Apple Pay
- Mar 2017 ○ Integrate third-party financial APIs into an existing iOS app in Swift
- Jan 2017 ○ Deliver a native app for both Android and iOS platforms
- Aug 2016 ○ Replace a team leader dev for an iOS app in Swift
- Jan 2016 ○ Take part in development of a new Android app
- Dec 2015 ○ Turn an in-house sw solution into a lib and release it as an SDK
- Nov 2015 ○ Deliver a native Android app
- Aug 2015 ○ Ship a native Android app
- Jan 2015 ○ Enhance and fix apps in production
- Sep 2014 ○ Automate builds and releases for Android apps
- Jun 2014 ○ Deliver a native Android app
- Feb 2014 ○ Ship a native Android app
- Sep 2013 ○ Deliver a native BlackBerry app
- Jan 2013 ○ Dispense a course on native Android development
- Dec 2012 ○ Take part in development of a native mobile iOS app
- Sep 2012 ○ Prototype a multi-platforms hybrid app
- Apr 2012 ○ Ship a native Windows Phone app
- Dec 2011 ○ Ship a cross platform iOS app
- Oct 2011 ○ Ship a cross platform Symbian app
- Sep 2011 ○ Begin working as Mobile Developer
- Apr 2007 ○ Begin working as Full Stack Web Developer
- Dec 2006 ○ Begin working as Java developer
- Jul 2006 ○ BS degree in Computer Science

# Projects grouped by clients

## TLC



*Role:* Mobile application developer (iOS)  
*Period:* March 2017 – ongoing  
*Experience:* Integrating REST web services and a new UI into an existing iPhone app  
*Technologies:* ApplePay, Apple Push Notifications, Alamofire, PromiseKit, RESTful APIs integration, OpenID Mobile Connect



*Role:* Mobile application developer (iOS)  
*Period:* August 2016 – February 2017  
*Experience:* Introduce an event based architecture, refactor and/or port ObjC code to Swift, implement features, introduce bug fixes, profile and improve performances  
*Technologies:* Swift, RxSwift, iOS, Alamofire, Realm, Xcode, CocoaPods

*Role:* Mobile application developer (Android)  
*Period:* January 2016 – August 2016  
*Experience:* Implement business logic flows pertaining the APIs with reactive programming and link them with the UI through an event based architecture, introduce planned features  
*Technologies:* RxJava, EventBus, Retrofit, Java, Android Studio, Gradle



*Role:* Mobile application developer (Android)  
*Period:* August 2015 – October 2015  
*Experience:* Design and implement methods to enable an OpenID Mobile Connect login; intercept an SMS with a PIN number in order to verify the phone number associated with a customer's data base, call a remote API to receive identification tokens that can be transferred by NFC technology (HCE), QRCode or via Bluetooth LE  
*Technologies:* Bluetooth, HCE, OAuth, OpenID Connect, Android Studio, Java

## TIMpersonal v2

Integration of banking APIs into an existing iOS application in order to provide banking services (virtualize physical credit cards, P2P payment between users, POS payments).  
*Released publicly in January 2018*

## TIMpersonal

iOS/Android application that provides an identification service based on the SIM to gain access to third party services: payment for goods/services of TIM business partners and obtain authorization to public administration services (SPID). The application provides other ancillary services: purchase of bus tickets and parking for many Italian cities and is able to capture and virtualize loyalty cards.  
*Released publicly in January 2017*

## MobileConnectProximity

A turnkey appliance that provides identification services based on OpenID Mobile Connect that can be used by third parties for authorize payments, turnstile opening, and so on. It consists of a *Desktop app* able to get an *identification token* via WebCam (QRCode), Bluetooth LE (GATT), PC/SC NFC reader (HCE), a *Mobile application* for both Android and iOS able to identify a user through an OpenID login and receive *identification tokens* to be transmitted to a *Desktop app*, a *Custom Bluetooth GATT Profile* and a *RESTful back-end*.  
*Released as prototype in November 2015*



*Role:* Mobile application developer (Android)

*Period:* June 2015 – August 2015

*Experience:* Design and implement an app to acquire and manage coupons captured by a QrCode or transferred via NFC interfacing with back-end via REST APIs

*Technologies:* Android, RecyclerView, CardView, Volley, REST APIs



*Role:* Mobile application developer (Android)

*Periods:*

- January 2015 – March 2015
- February 2014 – June 2014
- September 2013 – February 2014

*Experience:* Design and implementation, evolutionary maintenance, implementation of new features (meeting rooms reservation)

*Technologies:* Material Design, RecyclerView, CardView, Volley, REST APIs



*Role:* Mobile application developer (BlackBerry)

*Period:* August 2013 – September 2013

*Experience:* Interface to communicate to/from SIM NFC and NFC terminals (POS), implement management of service subscriptions (request, removal, operations related to payments, sending identity in terminals), management of PIN/PUK application integrated at the SIM Level

*Technologies:* Java Micro Edition, BlackBerry, NFC



*Role:* Mobile application developer (Windows Phone)

*Period:* January 2012 – April 2012

*Experience:* Develop a Windows Phone app with platform's UI native components, interface with RESTful back-end APIs

*Technologies:* C#, XAML

## TIM Tokky

Android app that captures coupons by a QR Code shown after watching videos provided by a *Sponsor's* website, or by a *Scratch Card* sold by the TIM telco. Coupons consist of hours/volume of internet traffic and can be activated in app or transferred to other TIM customers via the recipient's phone number or NFC.

*Released as a prototype in August 2015*

## SelfPass

Android application intended for corporate employees. Performs a virtual reception service allowing to *book a visit for a guest* and providing the guest's *entry clearance* in the company. The application also manage the booking of corporate resources (classrooms meeting) and enable access to the resource (opening enabling mechatronics for classroom meeting) via NFC.

*Released for corporate employees in June 2014*

## TIM Wallet

BlackBerry application for the management of smart cards (eg. attendance business badges, canteen badges, public transport badges).

*Released publicly in September 2013*

## SmartPass

Windows Phone/iOS application to enable use of payment services via prepaid virtual cards. The app makes available information services, self care, mobile couponing and advertising.

*Released as a prototype in April 2012*

## Medical research



*Role:* Mobile application developer (Symbian)

*Period:* September 2011 – October 2011

*Experience:* Develop a mobile application with a cross platform environment

*Technologies:* Rhomobile, Javascript, jQuery, Ruby, HTML/CSS

## Agenda della Salute

Symbian application providing an agenda where information about medical tests are displayed and recommended according on user's gender and age.

*Released publicly in October 2011*

## Services



*Role:* Teacher

*Period:* January 2013 – March 2013

*Experience:* Introduce the Android OS, its components and relative application programming techniques through a theoretical introduction accompanied by the development of a sample app that integrates ListView, database management, position management, maps, notifications, media, WebView and fragments

*Technologies:* Java, Android, Eclipse

## Android course

Dispense a course to introduce the Android architecture and train on the development of Android applications in Java.

## Other professional experiences outline

*Full stack web developer:* 6 times for 31 months in total

*Technologies:* Ruby, Ruby on Rails, Postgres, MySQL, Javascript, jQuery, jQuery UI, HTML/CSS, PHP, PRADO, Apache, SQL Server

*Desktop application developer:* 3 times for 15 months in total

*Technologies:* Java, Swing/AWT, JavaFx, PC/SC NFC, DB2 UDB

*Front end web developer:* 3 times for 8 months in total

*Technologies:* Jquery, Underscore, HTML5

*Operations engineer:* 2 times for 4 months in total

*Technologies:* Jenkins, Gradle, Maven, Artifactory, Puppet, Vagrant, VirtualBox, Bash, Ruby

*Firmware software developer:* 1 time for 2 months in total

*Technologies:* C, BlueGiga Proprietary Scripting Language, Bluetooth Low Energy Specs

# Education

## Qualifications

2006: *Bachelor's degree (5 years) in Computer Science*  
*Mathematics and Computer Science Department*  
*University of Catania, Italy*  
Mark: 108/110

1996: *Senior high school diploma specializing in science education*  
*Liceo "Don Bosco"*  
*Catania, Italy*  
Mark: 60/60

## Languages

	Understanding	Speaking	Writing	
	<i>Listening</i>	<i>Reading</i>	<i>Interaction</i>	<i>Production</i>
<i>Italian</i>	A1	A1	A1	A1
<i>English</i>	B2	B2	B2	B2

## Open source projects

*Privablic*: access to private members and methods of a C++ struct or class  
<https://github.com/altamic/privablic>

*Bitcoin Protocol*: Bitcoin protocol implementation in Ruby  
<https://github.com/altamic/bitcoin-protocol>

*Binary Finery*: library for reading/writing binary data in Ruby  
[https://github.com/altamic/binary\\_finery](https://github.com/altamic/binary_finery)

*Clinikr*: web application for estimating quotes for clinical analysis and related examinations  
<http://user:password@clinkr.com>

*Maintenancer*: web application for managing maintenance of machinery  
<https://github.com/altamic/maintenancer>

*Gestione Referti*: web application for the acceptance of clinical tests with statistical functions  
[https://github.com/altamic/gestione\\_referti](https://github.com/altamic/gestione_referti)

## Other activities

*November 2009*: implement a web application to manage thematic seminars.

*August 2009*: implement a web application to manage chemical analysis estimates.

*June 2009*: publish an introductory article about the use of Test Driven Development with Ruby on Rails on the *Rails Magazine*.

*April 2009*: [talk](#) at the *Telecom Working Capital Barcamp* entitled "*Redis, an high performance service for data structures storage*".

*January 2009*: co-founder of [Catania Ruby User Group](#) and organizer of regular meetings.