Carmen Alvarez

Software developer - Lyon, France

Seasoned software developer with extensive experience in multiple tech ecosystems, including Java applications, Android applications in Kotlin, and more recently backend development in Python and Node.js.

Contact

- ✉ carmen@rmen.ca
- ⬡ caarmen

Languages

- 🇬🇧 English (native)
- 🇫🇷 Français (courant)
- 🇪🇸 Español (oxidado)

Characteristics

- ✓ Proactive
- ✓ Meticulous
- ✓ Analytical

Principles

Split features into manageable iterations

Release frequently

Keep dependencies updated regularly

Follow recommended architectures

Aim for a good coverage of code by tests

Separate PRs for refactoring and features

Document well for others and for future self

Languages

Python, Kotlin, Java, Javascript, SQL, C/C++

General

Technical design, refactoring, modularization

Continuous integration, Jenkins pipeline, Github Actions

Git, GitHub, Pull Request review, Gitflow, trunk-based development

Unit test, integration test, end-to-end test, code coverage, sonar

Object-oriented programming, functional programming, scripts

Backend

YAML, Swagger, OpenAPI, ReDoc, MySQL/MariaDB

Pytest, Mocha

Django REST framework, Node.js

Android

MVVM, Room, LiveData, Data Binding, Paging, Material Design

Google Play Billing, Espresso, Robolectric, Mockito

Hobby/Personal projects

Spring boot, Qt, FastAPI, Swift, Vanilla JS/Electron, PWA

Experiences

Genymobile

Design And Development Engineer (Backend)

📅 Mar 2022 - Current   👥 3 back, 2 front   📍 Lyon, France

Development on a SaaS platform, providing Android virtual devices in the cloud, using a microservices architecture.

Development of new features, including new endpoints, and jobs for data migration and import.

Assist SRE team in investigation of production issues.

Technical design, estimation and planning of feature epics.

Coordination with the front-end team for REST endpoint design.

Performance optimization of SQL operations using the provided ORM.

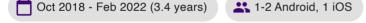Maintenance: bug corrections and dependency upgrades.

Culture of documentation, testing and collaboration.

Organisation : Team with backend, front, QA, PO. Scrum: 3-week sprints: daily, retro, grooming, poker planning.

Django REST framework (DRF), Python, Express (Node.js), AMQP (RabbitMQ), Unit and E2E tests (pytest, Mocha), Swagger/OpenAPI/ReDoc, MariaDB/MySQL, GitHub, Jenkins, Kibana, gateway, GraphQL

Libon

Mobile Lead

📅 Oct 2018 - Feb 2022 (3.4 years)   👥 1-2 Android, 1 iOS   📍 Paris, France

Continuation of the previous experience: Still the Libon project, but directly within the Libon company.

Feature development: Integrated new payment means (cash via scratch cards or qr codes, bank cards via Stripe), UI/UX redesign, integration of new products to buy.

Customized the Braintree SDK to improve the 3DS validation UX for credit card purchases.

Integrated A/B testing for credit card payments (Stripe vs Braintree vendors).

Migrated legacy code to modern standards: migration of screens with all the logic in activities to MVVM, migration of Robolectric tests to Espresso, migration of AsyncTask to Kotlin coroutines.

Modularized the monolith project to 60 modules, for a better organization of the code base, and elimination of cyclical dependencies.

Implemented/integrated tools to improve the development of both iOS and Android platforms: generation of release notes on GitHub, monitoring of code coverage, monitoring the migration of the Oblective-C to Swift migration, Jenkins jobs to synchronize strings from Lokalise, Jenkins job to build a fork of libphonenumber for iOS.

Organization: 1 release per month on average, daily with the mobile, backend, support, and QA, PR.

Android Studio/Gradle, Kotlin, Coroutines, MVVM, Modularisation, Androidx/Jetpack, Android Architecture Components, Room, LiveData, Data Binding, Paging, Material, Google Play Billing, Firebase Crashlytics, Linphone, Libphonenumber, Json, Glide, Volley, Mapbox, Brainree, Sripe, GitHub, REST, Junit, Robolectric, Espresso, Mockito, Jenkins pipelines, Jacoco, Detekt, PR, Code Review

Genymobile · orange

Design And Development Engineer (Android)

📅 Aug 2011 - Sep 2018 (7.2 years)   👥 1-13 Android   📍 Châtillon, France

The Libon app provides VoIPout calling to more than 150 countries.

Develop features and maintain the Libon Android app, which provides phone calls to mobiles and landlines over internet (VoIP).

Integrate and customize the Linphone SDK (NDK).

Increased unit test code coverage from 25% to 88%.

Modernize the code base with Kotlin migration, introduction of Google architecture components (LiveData, ViewModel), and other tools released by Google (ConstaintLayout, data binding).

Integration of CI tools in a dockerized Jenkins: Pipeline, Sonar, Jacoco, deployment to HockeyApp and Nexus.

Integration of the Google Billing library and other 3rd party billing solutions.

Point of contact with providers of third-party SDKs.

Publication on the Play Store.

Organization: Feature teams and component team, PR, code review, Scrum: 2-3 week sprints, daily, retro, demo.
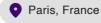
Android Studio/Gradle, Eclipse/Maven, Kotlin, Java, C, C++, Shell, Linphone, SIP, RTP, Libphonenumber, Json, Retrofit, RxJava, Firebase Remote Config, Firebase Cloud Messaging (FCM), Crashlytics, Smartling, MVP, REST, Robolectric, Mockito, Wiremock, Gitlab, GitHub, Jenkins, Jacoco, Sonar, Scrum, Pull Request, Code Review

ARIBA®

Senior Consultant

📅 Oct 2006 - Feb 2011 (4.4 years)   👥 1-3 Devs   📍 Paris, France

Ariba provides applications and B-to-B services for spend management.

Customize the Ariba software for client needs.

Led a team of two other developers.

Clients: AXA, Alstom, BNPP, Société Générale, Decathlon, RTE, Sanofi-Aventis.

Worked both at the client site and from the Ariba office.

Java, Weblogic, Eclipse, Oracle, Maven, Windows, Svn, Perforce

Software Developer/Consultant

📅 Nov 2004 - Sep 2006 (1.9 years)   👥 3 Devs   📍 Noisy-le-Grand, France

The RATP is the public transport operator in the Paris area

Developed a software to monitor equipment in the RATP stations.

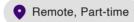C++, GCC, GDB, Makefile, Java, SNMP, Linux, CVS

Software Developer/Consultant

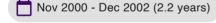📅 Jul 2003 - Feb 2005 (1.7 years)   📍 Remote, Part-time

Customization of the Lumos Technologies network equipment monitoring software, which was acquired by Micromuse, for the customer Net.com.

Java, JSP, Tomcat, SNMP, SQL, Ant, Windows
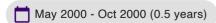
Member of Technical Staff

📅 Nov 2000 - Dec 2002 (2.2 years)   👥 7 Devs   📍 Santa Monica, California

Developed features for a network equipment monitoring software.

Java, JSP, Tomcat, SNMP, SQL, Ant, Windows

Client Integration Engineer

📅 May 2000 - Oct 2000 (0.5 years)   📍 Los Angeles, California

Customized the B-B homepage.com software for different clients.

Perl, C, BSD, CVS

Publications

Toward Cross-Language and Cross-Media Image Retrieval

Co-authors: Ahmed Id Oumohmed, Max Mignotte, Jian-Yun Nie

Sep 15, 2004, CLEF'04 (Cross-Language Evaluation Forum)

Modèles de langue en recherche d'information

Apr 29, 2004, Université de Montréal

Mots composés dans les modèles de langue pour la recherche d'information

Co-authors: Philippe Langlais, Jian-Yun Nie

Apr 19, 2004, TALN 2004, Session Poster, Fès, 19–21 avril 2004

Education

Master of Science, Computer Science

Université de Montréal

French equivalent: Bac + 5/6

Jan 2003 - May 2004

Bachelor of Science, Computer Science

California State Polytechnic University-Pomona

French equivalent: Bac + 4

1998 - 2000

Bachelor of Science, Civil Engineering

California State Polytechnic University-Pomona

French equivalent: Bac + 4

1994 - 1998