



Marc Ferrer Margarit

Software Architect · Android Automotive HMI

Email marc.ferrer.margarit@gmail.com LinkedIn [linkedin.com/in/marcferrermargarit](https://www.linkedin.com/in/marcferrermargarit)

Web [marcferrermargarit.com](#)

Location Barcelona Area, Spain

CORE SKILLS

Android Development

Kotlin Jetpack Compose
MVVM Clean Architecture
Coroutines Flow
Hilt/Dagger

Automotive

VHAL RSI/RUDI/ViWi
ASI SmartLight HMI
Esel 3D Engine

Web & Backend

Next.js TypeScript
React Native Node.js
Supabase

Tools & Practices

Git CI/CD Jira Figma
SOLID TDD

EDUCATION

Master's in Mobile Application Development

Universitat Oberta de Catalunya
2018 - 2020

Engineer's Degree in Computer Science

Universitat Autònoma de Barcelona
2012 - 2017

LANGUAGES

Catalan	Native
Spanish	Native
English	Professional
German	Basic

INTERESTS

3D Printing Gaming
Indie Dev AI / LLMs
Open Source

Software Architect with 8+ years building native Android applications, specializing in Automotive HMI for the VW Group. Proven ability to deliver complex embedded systems — ambient lighting, 3D rendering, vehicle state management — under tight quality constraints. Equally comfortable leading architecture decisions as implementing them hands-on. Passionate about clean code, continuous learning, and shipping products that work.

EXPERIENCE

Software Architect - Android Automotive HMI

2021 - Present

Volkswagen Group Services Barcelona · Barcelona, Spain

- Lead architect of ExperienceApp for CUPRA/CARIAD — ambient lighting control with Esel engine rendering, Jetpack Compose UI and RSI/RUDI/ViWi automotive protocols.
- Designed and enforced Clean Architecture + MVVM across the codebase; introduced Hilt DI, R8/ProGuard release pipeline, and systematic KDoc standards.
- Integrated VHAL and ASI SmartLight services for real-time vehicle hardware control, bridging embedded automotive stacks and Android application layer.
- Drove unit testing strategy, identifying RSI stub constraints that required on-device androidTest execution; unblocked CI by isolating testable layers.

Kotlin Jetpack Compose VHAL RSI/RUDI Esel 3D Hilt Coroutines

Android Developer

2018 - 2021

Medcom Tech · Barcelona, Spain

- Built and maintained native Android applications for B2B clients across retail and logistics sectors, from MVP to production releases.
- Introduced MVVM and Repository pattern across legacy codebases, significantly reducing bug rates and improving testability.
- Led migration of core apps from Java to Kotlin, establishing coding standards adopted team-wide.

Kotlin Java MVVM Room Retrofit RxJava

Junior Android Developer

2016 - 2018

Freelance / Early Career · Barcelona, Spain

- Delivered custom Android applications for SME clients; handled full cycle from requirements to Play Store release.
- Built proficiency in REST API integration, local persistence, and material design guidelines.

Java Android SDK REST APIs SQLite