

# JAIME GARCIA CORONEL

**Lead Embedded & Systems Software Engineer (C/C++)**

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## SUMMARY

Embedded software and systems engineer with 15+ years in automotive and aviation. Expert in C/C++ and Embedded Linux (Yocto), AUTOSAR and RTOS - from drivers/BSP to middleware/platform APIs. Pragmatic technical lead with strong debugging, V&V discipline, and mentoring (MISRA, ASPICE, DO-178).

## IMPACT HIGHLIGHTS

- Embedded Linux (Yocto) platform delivery: BSP integration, image/package definition, drivers, telemetry/observability, CI/CD.
- AUTOSAR delivery (BSW, SW-Cs, Complex Device Drivers): requirements -> design -> implementation -> unit/integration test.
- Cross-functional tech lead: drive API design, unblock integration issues, and mentor engineers to ship reliably.
- Python and shell script for automation/tooling: build scripts, test utilities, and data analysis to accelerate delivery.

## CORE STRENGTHS

Languages: C, C++, Python, Embedded C/C++  
+, Ada (V&V), Shell

Embedded: Yocto Linux, Linux BSP, Device Drivers, RTOS, QNX

Automotive: AUTOSAR, UDS, SAE J1939, Functional Safety (process)

**Quality:** MISRA C, ASPICE/DQMS, DO-178B (process)

**Tools:** Git/Gerrit, GitHub/GitLab CI, Jenkins, Jira, DOORS/DNG, Rhapsody, VectorCAST

**Strengths:** System integration, telemetry/metrics, profiling & performance, mentoring

## PROFESSIONAL EXPERIENCE

### CIDEC (Customer: Aptiv)

Lead Software Developer - Edge Platform | Guadalajara | Queretaro | Nov 2023 - Dec 2025

- Designed and enhanced Edge Platform middleware on Yocto Linux (application framework + HAL/platform APIs).
- Integrated low-level components (drivers, libraries, services) and collaborated with BSP/HW teams to resolve system issues.
- System driver integration and application framework development. collaborates with BSP (board support package) and hardware integration.
- Mentored junior engineers and reinforced coding standards and design reviews (MISRA, traceability).

### Luxoft (Customer: John Deere)

Software Development Engineer - Embedded Linux | Guadalajara, MX | Des Moines, IA, US | Jan 2023 - Nov 2023

- Implemented platform telemetry/health metrics (performance counters, latency/throughput indicators, resource utilization).
- Improved dual-SoC workload distribution and optimized per-SoC data pipelines via profiling and bottleneck removal.

- Triaged integration/runtime issues in PR-based CI/CD and documented workflows to speed onboarding.

### **Luxoft (Customer: Aptiv)**

Technical Lead Engineer - Edge Platform | Guadalajara | Queretaro | Apr 2021 - Dec 2022

- Owned driver integration and platform API design; translated app requirements into reusable platform services.
- Aligned platform interfaces with BSP constraints and validated portability across projects.

### **Luxoft (Customer: Visteon)**

Technical Lead Engineer - Digital Instrument Cluster (AUTOSAR/QNX) | Guadalajara | Queretaro | Jul 2019 - Apr 2021

- Authored/reviewed requirements and design artifacts; implemented and unit-tested components under MISRA and project processes.
- Led troubleshooting across integration/defects/change requests and supported teammates as technical lead.

## **EARLIER CAREER**

<b>2018-2019</b>	Dextra Technologies - Senior Embedded Automotive Developer (AUTOSAR): BSW/SW-Cs/Complex Drivers; unit/integration support.
<b>2015-2018</b>	Soluciones Tecnologicas - Project Lead / QA Lead: CI pipelines, test harness, requirements and qualification support.
<b>2010-2013</b>	GE Aviation Infrastructure - Technical Lead: V&V process support, mentoring, tooling/automation, Lean Six Sigma initiatives.
<b>2007-2010</b>	Global Vantage - Embedded Systems Engineer (V&V): Ada/C/C++ low-level verification, test design, stubs/interfaces.
<b>2004-2007</b>	Dinamica Computacional - Software Developer: Visual Studio/VB + C/C++ DLLs; deployments; MySQL/Oracle client integrations.

## **TECHNICAL LEAD HIGHLIGHTS**

- Reduced/avoided integration downtime by identifying root causes across BSP, drivers, and apps.
- Improved observability by defining actionable metrics/health checks and wiring them into CI and runtime monitoring.
- Stabilized real-time pipelines by tuning buffering/backpressure and eliminating performance bottlenecks.
- Accelerated onboarding by documenting build, flashing, debugging, and release workflows (add time saved / team size).
- Raised code quality through reviews, MISRA compliance, and unit/integration tests.

## **EDUCATION & CERTIFICATIONS**

**B.S. in Information Systems, Universidad de Guadalajara** | 2005

- ISTQB Certified Tester - Foundation Level (CTFL), 2016
- Six Sigma Green Belt, 2010
- AUT-018 Mandatory Training ASPICE/DQMS, 2019

## **LANGUAGES**

- Spanish (Native)
- English (Proficient)
- Japanese (Beginner)