MIGUEL CORONEL

Chief Technology Officer

Banking Technology Transformation · Enterprise Architecture · AI Engineering

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EXECUTIVE PROFILE

Chief Technology Officer with 13+ years in software and 12+ in financial services, combining technology direction, enterprise architecture and engineering leadership across complex banking transformations. Took two digital banking platforms from crisis or prototype to production—mobile banking for a national-coverage bank (live 2020) and for a multi-bank group (live Sep 2026)—and delivered a build-ready AWS-native multi-core architecture (2026). Builds the practices, technical leaders, standards and AI-enabled SDLC that sustain them, as final technical authority for architecture, technology selection and senior hiring across NOVA's technology practices.

SELECTED EXECUTIVE IMPACT

- **Engineering capability.** Grew NOVA's middleware practice from two developers to ~250 consultants through hiring, training, seniority frameworks and leadership development, forming technical leaders who went on to own accounts and projects.
- **Financial-group target architecture.** Led security governance and the target architecture (BIAN, taxonomy, API governance, archetypes) for a Mexican financial group by directing, coaching and reviewing the responsible NOVA architect.
- **Digital banking platform.** Took over a stalled modernization for a Mexican multi-bank financial group after a prior vendor; designed the BIAN-aligned banking and security architecture (authorization platform selection, adaptation of the channel platform on OpenShift to the existing core), engineering standards and team structure. The complete mobile application went live in September 2026; the platform is now reused by corporate web banking.
- **Multi-core banking platform.** Engaged after an urgent production stability assessment, then mandated by the CEO to define the bank's target architecture. Designed the complete AWS-native enterprise architecture for three coexisting cores—a legacy on-premise core and two versions of a commercial core, on-premise and cloud—and led delivery of the full package: ADRs, views, security platform, routing/adapters, archetypes, shared libraries and implementation guidance, ready for build by internal teams, software factories or turnkey vendors.
- **Mobile banking modernization.** Led the architecture and engineering model for a national-coverage bank's program that delivered ~100 microservices and ~250 APIs, with a four-squad, 40+ professional organization and 7 direct reports; established layered architecture, engineering standards, governance and production-readiness practices. First release live September 2020.
- **AI Engineering.** Designed NOVA AI Engineering end-to-end—operating model, AI-SDLC, governance, human/agent responsibilities, evidence and measurement—targeted for rollout in 2027. Previously created the BIAN architecture-generation agent pipeline later adapted into the company's agent platform, and introduced AI-assisted legacy analysis on the multi-core program.
- **Real-time fraud integration.** Designed the initial antifraud integration layer for a national-coverage bank's fraud-platform adoption and defended it in a competitive selection won by NOVA; governed its evolution through the bank's architecture committees, including the final pre-core synchronous design and the key-custody model under multi-cloud constraints.

PROFESSIONAL EXPERIENCE

NOVA SOLUTION SYSTEMS · Mexico City, Mexico

Chief Technology Officer — Jan 2023 – Present

- Set technology direction for NOVA's banking engagements as final technical authority for architecture, technology selection, corporate engineering standards and senior technical hiring and promotion decisions.
- Lead technology capability across web, middleware, architecture and AI through four Practice Leads and senior technical leaders.
- Advise banking executives and architecture/governance forums on target architecture, security, modernization sequencing, platform choices and transition risk.
- Shape technical solutions for strategic banking and fintech opportunities—architecture, roadmaps, delivery models and technical defense before client executives and governance forums.

- Helped drive NOVA's shift from staff augmentation toward architecture-led consulting engagements, defining delivery models, technical governance and the standards adopted across practices.

Practice Lead Oct 2019 – Dec 2022

- Built distributed-systems, API and microservices capability through hiring, technical training, seniority criteria, mentoring, engineering standards and reusable archetypes.
- Led architecture and technical governance for a national-coverage bank's mobile banking modernization, establishing the working patterns four multidisciplinary squads used through production.
- Expanded from practice leadership into cross-client architecture, modernization and technical-governance responsibilities, forming the foundation for the formal CTO mandate.
- Developed technical leaders through coaching, promotion and delegated ownership, creating continuity beyond individual projects.

EARLIER EXPERIENCE

AN DIGITAL / ANZEN · Mexico

Engagements for a global bank's Mexican subsidiary

Middleware Engineer › Personal Banking Technical Lead › Digital Engineering Technical Lead Jul 2014 – Oct 2019

- Progressed from Edify Workflow/Workforce middleware specialist to Personal Banking Technical Lead; early work included AES-256 remediation for a Java/Spring application, an end-to-end WebLogic platform migration and an ETL migration from Solaris/Sybase to Linux/Oracle for card-embossing processes.
- Solved a critical legacy-integration constraint during the bank's transition toward microservices: designed and developed a multithreaded C/Linux socket bridge, with connection reuse and thread pooling, connecting cloud-native services to legacy transaction-processing systems.
- Led technical implementation across approximately three multidisciplinary cells during the 2018 modernization—code review, standards compliance, mentoring, legacy integration and production readiness; the first release reached production in late 2018.
- Then embedded as Digital Engineering Technical Lead, responsible for feature solutioning and technical correctness through architecture governance.

NOVUTEK · Mexico

Middleware Developer Feb 2013 – Jul 2014

- Developed high-volume IMSS backend processing in C/C++ and Oracle Pro*C—multithreading, synchronization, database integration and a PDF-generation wrapper for massive-distribution workflows.

CORE EXPERTISE

Technology leadership	Technology direction · Technical authority · Practice leadership · Leadership development · C-level advisory · Strategic solution shaping
Banking transformation	Digital banking · Core modernization · Legacy modernization · Payments · Identity · Fraud
Enterprise architecture	BIAN · TOGAF · Target & Transition Architecture · Domain Architecture · Architecture Governance · ADRs
Engineering & cloud	Microservices · APIs · Event-Driven Architecture · AWS · OpenShift/Kubernetes · DevSecOps · Observability
AI Engineering	AI-SDLC · Agentic Systems · RAG · Human-in-the-Loop Governance · Engineering Automation
Technologies	Java · Spring Boot · Quarkus · C/C++ · Kubernetes/OpenShift · AWS · Kafka · PostgreSQL · Temenos T24/Transact · OAuth2/OIDC · Keycloak · KMS/HSM · OpenTelemetry

EDUCATION & LANGUAGES

Education	**Ingeniería en Comunicaciones y Electrónica** · specialization in Electronics · ESIME, Instituto Politécnico Nacional	1997 – 2001
	Graduate studies in Computer Science · Centro de Investigación en Computación (CIC), IPN · coursework completed, degree not obtained	2009 – 2010
Languages	Spanish (native) · English (professional working proficiency)	