Omar Rodriguez, Ph.D.

SENIOR PRODUCT & RISK TECHNOLOGY LEADER | TECHNICAL PRODUCT BUILDER

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Professional Summary

Senior product and risk technology leader with 7+ years of experience modernizing credit-decisioning platforms in highly regulated banking environments. Proven record leading platform migrations, data integrations, automated testing, and cross-functional product delivery at scale. Ph.D.-trained engineer and co-founder of CleanAR Solutions, combining product strategy, hands-on technical execution, and operational leadership.

Core Expertise

Product Leadership
Roadmaps, platform modernization, launch readiness, stakeholder alignment

Risk & Decisioning
FICO Decision Modeler, SRL/Blaze, scoring strategies, regulated delivery

Data & Technology
MongoDB, SQL, SAS, APIs, automated validation, data reconciliation

Technical Delivery
Code reviews, integration strategy, testing frameworks, team enablement

Entrepreneurship
0-to-1 product discovery, operations, quoting, invoicing, workflow design

Engineering
Reliability, root-cause analysis, validation, research, systems thinking

Professional Experience

Co-Founder & CEO
June 2024–Present

CleanAR Solutions · Toronto, ON · Entrepreneurial Venture

- Co-founded a residential and commercial service business, leading product strategy, operations, customer acquisition, quoting, sales, and financial management.
- Designed and built internal software for customer management, quotes, bookings, invoicing, employee workflows, reminders, role-based administration, and reporting.
- Develop the platform with React, Vite, Node.js, Express, MongoDB, Mongoose, and API-driven architecture, translating firsthand operational problems into iterative product improvements.

Senior Product Manager
November 2021–Present

Scotiabank · Toronto, ON

- Lead product strategy and delivery for automated credit-adjudication capabilities across regulated banking portfolios.
- Led the migration of four unsecured product families to FICO Decision Modeler, completing the transition with zero reported post-migration issues.
- Defined strategic data requirements and integration strategy for five major retail-banking product launches, supporting launch readiness and post-launch analytics.
- Developed decisioning functions and flows using FICO SRL, conducted code reviews, automated MongoDB data extraction, and trained teams on Decision Modeler and MongoDB Compass.
- Launched key platform capabilities that reduced time-to-market by 50% and supported scalable automated decisioning for 80,000+ credit applications.

Risk Technology Manager
May 2019–October 2021

Scotiabank · Toronto, ON

- Implemented 30+ customer-evaluation models and strategies across Canadian and Caribbean portfolios, including the bank's first in-house risk-based scoring models.
- Accelerated model deployments by 60% through reusable implementation practices and cross-functional delivery leadership.
- Developed an automated regression-testing framework using SAS and VBA, improving validation efficiency and reducing errors.
- Led multi-source data reconciliation for migration initiatives and built tools for rapid test-data preparation and analysis.
- Troubleshot FICO decisioning platforms, contributing to a 60%+ reduction in system downtime and lower reliance on external consultancy.

Earlier Engineering & Research Experience

Reliability Engineer
November 2018–April 2019

GVA Lighting · Oakville, ON

- Executed R&D and reliability testing on LED prototypes, identified critical failure modes, and delivered findings that informed design and production decisions.
- Standardized test procedures and reporting workflows, reducing report-generation time by 30% and improving failure-data analysis.

Postdoctoral Fellow 2017–2018
Toronto Metropolitan University · Toronto, ON

- Led biomaterials laboratory operations and secured a CAD $75,000 NSERC grant for critical research equipment.
- Developed bioactive glass coatings and scaffold fabrication methods for medical implant applications while supervising 10+ students.
- Authored and co-authored multiple peer-reviewed scientific publications and managed advanced materials characterization and testing protocols.

Validation Engineer November 2011–August 2013
Hospira · Haina, Dominican Republic

- Led validation of 100+ product specifications and qualification of 10+ manufacturing systems in a GMP-regulated environment.
- Performed risk-based assessments, root-cause investigations, and process-change evaluations, translating findings into mitigation and implementation plans.
- Supervised validation personnel and coordinated plant protocols to maintain compliance, technical quality, and delivery timelines.

Engineering Technician November 2010–October 2011
Hospira · Haina, Dominican Republic

- Improved a tube-cutting operation by 100% through new cutter-station design and converted 40% of analog airflow testers to digital systems.
- Maintained and troubleshot PLC-controlled manufacturing equipment, reducing downtime from technical interventions.

Education

Ph.D. in Mechanical Engineering — Toronto Metropolitan University **2013–2017**
Dissertation: Bioactive coating for Direct Skeletal Attachment application for lower limb prostheses.

M.Sc. in Mechanical Engineering — Utah State University **2009–2010**
Thesis: Thermo-Mechanical Reliability of Micro-Interconnects in Three-Dimensional Integrated Circuits: Modeling and Simulation.

B.Sc. in Mechanical Engineering — Utah State University **2005–2010**
Focus: Solid Mechanics; minor in Mathematics.

Full Stack Development Certificate — University of Toronto **2022**

Selected Technical Projects

Nickless Socialize API — Sole-author Node.js/Express API using MongoDB and Mongoose to manage users, thoughts, reactions, and friend relationships.

Travel Blog — Four-person full-stack project; contributed comment and voting models and APIs, authentication, and post-interaction workflows using Node.js, Express, MySQL, Sequelize, Handlebars, and sessions.

Nickless Weather Radar — Sole-author JavaScript application integrating external weather APIs to provide current conditions and forecasts by city.

Technical Skills

Product & Delivery: Product strategy, roadmaps, platform modernization, data requirements, stakeholder alignment, Agile delivery, Jira, Confluence

Risk & Data Technology: FICO Decision Modeler, FICO SRL/Blaze, credit decisioning, data governance, SAS, VBA, SQL, MongoDB, automated regression testing, data reconciliation

Software Development: JavaScript, Node.js, Express, React, Vite, HTML, CSS, Python, C++, MongoDB, Mongoose, MySQL, REST APIs, GraphQL, Git, unit testing

Recognition & Languages

Recognition: 2026 Risk Champion, Global Risk Management, Scotiabank — 2025 DataIQ Awards shortlist — Transformation with Data and AI, Client Side; Scotiabank Best of the Best — Top Individual Performance Award, 2020; Ryerson ATOP Scholarship, 2014–2016

Languages: Spanish — Native | English — Fluent | French — Conversational