

FRANK MORALES AGUILERA, BEng, MEng, SMIEEE

Boeing Associate Technical Fellow | 2025 Thinkers360 Top Voice: overall & North America

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EXECUTIVE SUMMARY

Boeing Associate Technical Fellow representing the **top 1.5%** of the global workforce with over 19 years of distinguished service at **The Boeing Company**. Recognized as a **2025 Top Voice Overall & North America** (Thinkers360) and the **Global #1 Thought Leader in Open Source**. Prolific multidisciplinary inventor with **3 Issued US Patents** and **4 Pending US Patent Applications** spanning **Aerospace, Neuroscience, Cancer Treatment, and Proteomics**. Currently managing a long-term medical disability (Cancer and Neuropathy) while maintaining elite professional standing and global technical influence.

THOUGHT LEADERSHIP & GLOBAL RECOGNITION

- **Thinkers360 Top Voice 2025:** Awarded **Overall Top Voice** and **Top Voice North America**.
- **Global Rankings (2025):**
 - **#1 Thought Leader: Open Source.**
 - **#4 Thought Leader: AGI**
 - **#4 Thought Leader: Predictive Analytics.**
 - **#5 Thought Leader: Agentic AI.**
 - **#6 Thought Leader: Generative AI.**
- **Academic Impact:** 34 peer-reviewed publications with **2,052 total citations**; core contributor to research published in the prestigious journal **Nature**.
- **Senior Member, IEEE:** Recognized for significant contributions since 2001 (SMIEEE).

INTELLECTUAL PROPERTY PORTFOLIO

Aerospace & Flight Optimization

- **US 10,522,045:** Flight Schedule Disruption Awareness Systems and Methods (Issued).
- **US 10,467,910:** Flight Schedule Disruption Awareness Systems and Methods (Issued).
- **US 20230152101:** Pairing Aircraft for Formation Flight (Pending Application).
- **US 20230278727:** Systems and Methods for Analyzing Aircraft Utilization Within a Fleet (Pending Application).

Neuroscience & Medical Technology

- **US 7,092,748:** Tomography Of The Primary Electric Current Of The Brain and Heart (Issued).
- **TAT-001 / TAT-005:** Methods of Assessing and Treating Cancer (Pending Applications).
- **Proteomics:** Mass Intensity Profiling System and Uses Thereof (Pending Application).

PROFESSIONAL EXPERIENCE

THE BOEING COMPANY (Jeppesen / ForeFlight) | Montréal, QC

Associate Technical Fellow / Technical Lead | November 2020 – Present

- **Enterprise Stewardship:** High-level technical authority for global cloud-interoperability native services, serving in the top tier of technical leadership.
- **Cloud Modernization:** Architected major transformations (AWS, Azure, GCP), projected to save high recurring annual costs through enterprise-wide system optimization.
- **Strategic Revenue Growth:** Led the design of Airline Operation Control Center (AOCC) solutions that directly secured major client contracts and reduced flight delay analysis time.
- **Inventor Recognition:** Recipient of the **2022 Boeing Inventor Award** and multiple **Special Inventor Award Desk Trophies**.

Senior Cloud Solution Architect (Levels 3, 4, & 5) | May 2007 – November 2020

- **Mission-Critical Solutions:** Designed back-end solutions handling operational aerospace data using Kubernetes, Docker, and Microservices.
- **Seniority Milestone:** Over 18 years of dedicated service, nearing a 20-year career milestone at the time of termination.

EDUCATION

- **Massachusetts Institute of Technology (MIT) Sloan School of Management:** Executive Certificate in Management and Leadership (**2018–2019**).
- **Kyiv Institute for Civil Aviation Engineering (KIIGA):** M.Eng. & B.Eng. in Avionics, Artificial Intelligence, and Expert Systems (**1983–1989**).
 - Both degrees were awarded with **Distinction**.
 - Thesis focused on early AI methods (Fuzzy Logic and Expert Systems) for avionics.