

Lucas Maia

AI Architect Director

Professional Experience

AI Architect Director at NTT Data North America

2024—Current

About Me

I serve as AI Architect Director at NTT DATA North America, where my team and I drive innovation at scale through the design and deployment of cutting-edge Artificial Intelligence solutions. Blending over 10 years of AI expertise — particularly in Generative AI and Computer Vision — with 15+ years of experience in digital innovation, I apply [Lean Startup](#) principles to rapidly prototype, test and implement emerging technologies with the use of AI. I'm specialized in leveraging emerging technologies to solve complex problems and have a track record of successful driving results using hypothesis-driven experimentation.

Contact Information

Location: St. Petersburg, FL - USA

Skills & Expertise

Nationalities and Languages

Brazilian, Portuguese and USA Nationalities

- Portuguese (Native)
- English (Fluent)
- Spanish (Fluent)
- French (Beginner)

Education

MIT School of Management

Executive Education in Management and Leadership

University of Sao Paulo

BSc, Computer Information Systems

Certificates

[Generative AI Black Belt](#) (NTT Data Inc. - GenAI Academy)

[Machine Learning in Business](#) (MIT SLOAN - Mgmt & Leadership)

1- AI North America Delivery Team

Built and direct a multidisciplinary agile team of AI professionals (Software Engineers, Sol. Architects and Data Scientists) that under my leadership have delivered tailored, high-impact AI solutions for over 20 clients while fostering a culture of continuous learning and cross-functional collaboration.

2- AI Agent Builder Platform

Drove strategic and technical advisory for a Japanese tech company's agentic AI platform. Shaped enterprise positioning, pricing strategy, and architecture by defining differentiators like multi-model orchestration and portability. Aligned cost models with infrastructure economics (inference, agent, hosting) and guided discussions on observability, governance, and go-to-market readiness for executive stakeholders.

Solution: A hyperscaler-agnostic AI Agent Builder Platform designed for enterprise-grade deployment and extensibility. The platform integrates a modular Agent Runtime and Access Service, MCP Server, and Model Gateway to unify interaction across large language models and toolchains. It includes an Enterprise Memory Service for contextual continuity, an Observability and Governance layer for compliance and performance oversight, and a Data Platform that ensures secure, governed AI data workflows. Together, these components enable organizations to design, deploy, and manage intelligent multi-agent systems with operational transparency and scalability across any cloud or on-prem environment.

Tech stack: *Can't be publicly disclosed.*

3- AI Engineering Blueprint Interpreter

Led the end-to-end design of a multimodal AI solution combining Generative AI and Computer Vision to interpret complex, IP-protected railroad engineering drawings. The system integrated four AI models to extract structured insights from engineering schematics. Leveraging a custom object detector trained on 1,500 annotated images and visual prompt tuning, the solution identified and contextualized over 100 object classes, achieving 82.5% accuracy across seven critical operational scenarios.

Solution: 4 AI models combined (Yolov11 + GPT-5 + OCR): Custom object detector (trained on 1,500 images/24k labeled objects across 28 classes), engineering ontology, and visual prompt tuning to detect 100+ object classes, understand contextual relationships, and achieve 82.5% accuracy across 7 key scenarios.

Tech Stack: *Python / Streamlit / Docker / Azure OCR / Yolov11 / Ultralytics SDK / Azure ML.*

Sr. Solutions Architect at Kimberly-Clark AI Innovation

2021—Current

1- Generative AI Platform (Global)

Principal Solution Architect of the first Generative AI Platform for digital applications at Kimberly-Clark. Currently in use by Procurement, Supply Chain and Marketing (rolling out to other functions).

Solution: A Global Generative AI Platform in a private network that utilizes foundational models to generate new content, perform retrieval augmented generation (RAG) over corporate data, automate processes, and enhance productivity across various business functions. Designed to streamline operations, foster innovation, and provide competitive advantages in the marketplace when connected to new or existing digital solutions.

Tech Stack: *OpenAI APIs / Kubernetes / Langchain / Azure AI Search / Cosmos DB / React JS.*

2- Intimus NFT art festival (Latin America)

Artificial Intelligence: Implications for Business Strategy (MIT SLOAN - Mgmt & Leadership)

Questions Are the Answer: Creative Problem Solving, Innovation, and Change (MIT SLOAN - Mgmt & Leadership)

Blockchain Technologies: Business Innovation and Application (MIT SLOAN - Tech & Operations)

Managing Machine Learning Projects- (Coursera - Google Cloud)

AWS Solutions Architect Associate (AWS - YEZSPMCPER1Q05F)

Project Management Professional (PMI - 21117394)

SAP Sales and Distribution Consultant (SAP - 0009476613)

Tech Skills

Back-end: JavaScript / Python

Front-End: NextJS / Tailwind CSS

Smart Contracts: Hardhat / Solidity

DevOps: YML Pipelines / Github / Azure DevOps

Cloud Architecture: Azure / AWS / Terraform / Docker

Machine Learning: Foundational Models / Yolo Models / AutoML / Tensorflow / Keras

Dev Environment: Unix (preferable) / Windows

Idea co-owner and hands-on solution architect of the first marketing campaign utilizing NFTs for community building as part of Intimus' 3 years strategy to build digital communities. festival-intimus.art.

Solution: (1) High-fidelity prototype for Customer Validation (Desirability - [IDEO](#)) using a Next JS front-end with Flowbite components (Tailwind) and EVM Smart Contract managed through [ThirdWeb SDK](#); (2) MVP solution developed in collaboration with [Women Force](#) and [Samambaia Labs](#).

Tech Stack: [ThirdWeb](#) / [Wagmi](#) / [Connect Kit](#) / [Alchemy](#) / [IPFS](#) / [NextJS](#) / [Azure](#).

3- Computer Vision Model and APIs (Global)

Solution architect and ML engineer to train a transformers model for classification of poop color, served through APIs on Azure to a React front-end pilot application.

Solution: This initiative has 3 distinct architectures that have been developed to test different hypothesis and provide options for markets with specific needs. First version was developed in-house using a React Front-end, Azure serverless functions behind API management and a non-relational DB. Second version was built by a partner with computer vision expertise, which used images from our R&E to train a classification model and also provisioned a newer version of the front-end. Third version mocks up the machine learning model using RGB color mapping to cut costs and reduce maintenance needs, priding very similar results. A in-house transformers model has also been trained using data collected from real consumers from the previous versions with very positive results.

4- “Proof of Achievement” Non-fungible Awards (Global)

Idea owner, solution architect, solidity engineer and product owner of an internal experiment to “de-risk” and show value of Web 3 technologies to businesses and Global IT leadership. Award NFTs in 2022: “CIO Awards”, “R&E Technical Excellence” and “Global Digital Innovator of the Year” [OpenSea](#).

Solution: EVM Smart Contract Factory deployed on Polygon (L2) to manage Smart Contracts (awards) with ERC1155 tokens (multiple owners).

Tech stack: [Hardhat](#) / [Alchemy](#) / [Piñata](#) / [Wallet Connect](#) / [React](#) / [Storybook](#) / [Web3.js](#) / [GraphQL](#) / [Azure](#).

5- “Point of View” (POV) on Metaverse (Global)

I discuss the potential of decentralized metaverse and blockchain networks, as well as the possibilities created by decentralized applications and non-fungible tokens. The POV article explores how these emerging technologies can be used to innovate and create value for CPG corporations. By leveraging the reduced cost of verification and networking of non-fungible tokens and decentralized applications, CPG corporations can create new revenue sources and better engage with consumers.

Solution: A point of view article presented to the CIO organization and the Global Digital Technologies Solutions organization on the evolution of the concept Metaverse, diving into some of its building blocks and how the maturity of decentralized blockchain networks have contributed to a alternative proposal of what the Metaverse will be. It also looks at the functional role of crypto and non/semi-fungible tokens.

Innovation Architect Manager at Nestle Innovation Outpost

📅 2018–2021

Refill+ Nestle Waters Smart Water Dispenser (Global)

Principal architect leading the redesigning of the global Nestle Waters Refill+ smart water dispenser for first roll out in Europe to confirm POC assumptions and test initial hypothesis.

Solution: IoT water dispenser activated with a Mobile App and/or NFC bottles, integrated with AWS IoT Hub for device governance, Magento headless eCommerce backend to handle orders, Drupal front-end and SAP asset management workflows. See machine [here](#).

“Blue Ears” Rapid Experiment (Global)

Idea-owner, solution architect and project manager of the rapid experiment using Industrial IoT Microphone to train ML Models to analyze the sound of food processing equipment in factories in partnership with [OneWatt](#).

Solution: Industrial IoT Microphone "E.A.R.S" integrated with a SENS-AI neural stack AI and APIs for corporate data analysis and decision making.

"NEO" Rapid Experiment (Global)

Idea-owner, solution architect and project manager of the rapid experiment using an open source Mobile Application with Machine Learning to help the crowdsourcing of images of Nestle coffee machines to compose a dataset for training a computer vision classification model for use by our support chatbots.

Solution: Mobile app developed using Flutter (outsourced software developer) interacting with GCP APIs for image storage and ML Model rapid training using AutoML.

IT Project Manager at Nestle IT North America

📅 2014–2018

Technical project manager, part of the Mobile Field Sales team, responsible for managing the global roll out of Mobile applications for the Field Sales teams in North America as part of the Sales Force Automation program in North America.

- Total Deployments: 7 Projects
- Users Affected: 6000+ Sales Reps
- People Managed: 15+

Volunteer Project|Product manager at Brasa Design

📅 2014–2016

My expertise in project management, combined with my knowledge of digital technology and innovation, has enabled me to volunteer as a Project Manager and Product Manager for Brasa Design, a Web 2 creative design agency specialized in working for Brazil's third sector (private non-profitable organizations), providing consultancy and guidance to help them reach their goals. [See their portfolio](#)

🎓 Achievements

Intangible Cultural Heritage Inventorying using Blockchain Networks

🏛️ *MIT SLOAN Primer*

Cultural historical records lay the foundations for better understanding and dialogue between generations and societies. It is therefore of extreme importance to practitioners, researchers, and our society in general to find ways to document the practice of intangible cultural heritage, ensuring the survival of its elements and traditions.

[Article Link](#)

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VIP Roundtable - Web 3, Metaverse & NFTs for Brands

🏛️ *Landmark Ventures + House of First*


Participant of a roundtable discussing the how brands are leveraging Web 3, NFTs and the Metaverse concept, to create shared value. Participants discussed topics such as the potential of the metaverse for brands, the use of blockchain-based non-fungible tokens, the implications of Web 3 for brands, and the potential of virtual stores, challenges associated with these technologies and the opportunities for businesses to create new models and experiences.

CapoeiraViva.net

 CapoeiraViva.net

An audiovisual historical archive of capoeira rodas and events around São Paulo, Brazil. The first and largest historical archive online of the world. CapoeiraViva.net

Historia e Quadrinhos Podcast

 [H&Q Podcast](#)

Launch of the project "[Historia e Quadrinhos Podcast](#)" with a group of historian teacher friends that developed a novel methodology to teach history using comics in Brazil. I was responsible for the Website and Social Media.

WordCamp St. Louis Speaker

 Wordpress.org

Speaker at WordCamp St. Louis 2015 and 2016 on [Managing WordPress projects](#).

Thank You!

Thank you for investing the time to review my experience; if you reached this far, I already appreciate the care you bring to hiring, your attention to detail is exactly the kind of culture I'm excited to contribute to.