# ARI KAMLANI AI/ML TECH STRATEGY & SYSTEMS ARCHITECT

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Manhattan, NY



# **EXPERTISE**

Artificial Intelligence (AI)

Machine Learning (ML)

Responsible Al

DataOps, MLOps, Infrastructure

Innovation & Experimentation

Product & Platform Strategy

Stakeholder Management

Strategic Storytelling

Design Thinking

Agile Methodology

#### EDUCATION

Digital Strategy Section4 Business Strategy

Product Management Product School

Big Data Strategy
Design Thinking
Rutgers Innovation Center

Credits Forward / MS Data Science

Data ScienceTech Institute

Immersive, Data Science
Galvanize

B.S. Electrical Engineering **Lehigh University** 

# SUMMARY

Accomplished AI/ML technology, researcher, and product leader experienced in shaping strategy and delivering machine intelligent technology solutions for enterprise global programs. Skilled in operating in ambiguity and across the product innovation lifecycle, from incubating early-stage initiatives to executing at scale. Recognized as a creative cross-functional leader, bridging business and technology, and identifying new R&D high-value opportunities with minimized risk exposure.

#### EXPERIENCE

# Beyond Limits | Manhattan, NY

2021 - Present

Senior AI Strategist and Technology Systems Architect – Office of CTO (OCTO)

Advance AI R&D portfolio growth investments, instrument processes to qualify leads, collaborate with C-Suite on new R&D greenfield innovation horizon opportunities

- Lead AI PaaS ecosystem strategy, systems architecture, requirements definition and roadmap planning for Hybrid AI, pairing data-centric ML with cognitive symbolic knowledge constraint reasoning and explainable decision support audit trails
- Execute multiple technology partnership initiatives, establishing evaluation scorecards for technology adoption and designing prototypes for incorporation across business use cases, product designs, and MLOps architecture designs
- Conduct client workshops, craft SOW proposals, prototype and transform AI model designs and systems architecture for incubating R&D client opportunities across clinical preventive care risk stratification, infant growth journey tracking deployed at the edge, and optimizing commercial energy efficiency for HVAC systems

#### ThoughtWorks | Manhattan, NY

2018 - 2020

Principal Data Scientist – Professional Services (PS)

Shape machine intelligent portfolio client pursuits, collaborate with leadership on AI emerging trends, improve policies for strategic project acquisition and maturity

- Led the evolution of AI multimodal semantic search ranking microsite experiences, supplemented by content governance, query disambiguation, and KB entity linking
- Established responsible suites to improve model robustness, group fairness and
  equal opportunity disparities with guardrails, decision judgement layers, and
  behavioral testing per information retrieval and data journalism compliant registries
- Optimized inefficiencies in supply chain lubricant inventory order fulfillment, forecasting safety stock demand with truck packing convex solver constraints

# **Skymind / Pathmind** | San Francisco, CA

2017 - 2019

Deep Learning Engineer Consultant – Product and Solutions Architecture

Create and champion deep learning offerings (TensorFlow, PyTorch, DL4J) from research to production across text, vision, and reinforcement simulation technologies

- Enabled business development in partnership engagements, benchmarking optimizations (Intel Xeon 2<sup>nd</sup> Gen with MKL), and enterprise L&D training workshops
- Guided the reinforcement learning (RLlib, Ray) PaaS architecture of decision multiagents for training and serving policies of simulation environments (AnyLogic)
- Led engagements to evolve model architecture performance, e.g., via shallow encoders to distilled transformer architectures for semantic query intent matching, and residual temporal layers per robotic fusion welding dispersion object detection

#### **TECHNOLOGIES**

Languages: Python, R, SQL, Scala, Java, C/C++, ARM, JS, HTML, CSS

**Environments**: Jupyter, Colab, PyCharm, VSCode, RStudio, Zeppelin, IntelliJ, Eclipse

Cloud: AWS, Azure, GCP

ML Ecosystems: PyTorch, TensorFlow, DL4J, Scikit-learn, Hugging Face, Ray/RLlib, Gym, Apache Spark, spaCy, OpenCV, Optuna

**MLOps**: MLflow, Airflow, Tecton Feast, Docker, FastAPI, Prometheus

**Databases:** Elasticsearch, Solr, MongoDB, Snowflake, Cassandra, Redis, PostgreSQL, Neo4J, MySQL, SQLite

**Apps & Visualization:** Streamlit, Tableau, Kibana, Grafana

**GitOps:** Git, Bitbucket, Perforce, ClearCase, SVN, PVCS, Travis, Jenkins, GoCD, GitHub Actions

**PM:** Jira, Pivotal Tracker, Aha, Basecamp, Bugzilla, Doors

Collaborative Tooling: Miro, Confluence, Notion, Airtable

#### **PATENTS**

Device Localization based on a Learning Model (2017)

Interference Control in Wireless Communications (2016)

# EXPERIENCE (CONTINUED)

# JP Morgan Chase | Manhattan, NY

Data Scientist – Digital Intelligence, Consumer and Community Banking (CCB)

Strengthen Chase personalization experiences and platforms, delivering scalable ML recommendation models and insights across their regulated governed lifecycle

- Crafted implicit multi-stage personalized ranking models serving branded loyalty offers per customer redemption history and spending propensity card transactions
- Partnered with business units to deliver personalized banking card targeted ad FOMO campaigns based on segmented cash flow spending behavioral models
- Launched the suggestive nudge cash flow savings and investment offerings, implemented by scalable neighborhood embedding proximity (PLY) models

# Techstars | Manhattan, NY

2017 - 2017

2017 - 2018

Technologist in Residence (TIR) – Venture Accelerator, IoT Division

Advise and facilitate the technology evolution of several seed entrepreneurial startup ventures in acquiring their next round of funding and advancing their roadmap offerings

- Launched multiple starter kits for startups to transform their ML technology designs, e.g., from single node to distributive compute, augmented training data with synthetic simulation data, mocked experimentation scenarios and evaluations
- Scaled data connector services to accelerate concurrent onboarding and pilot
  execution via transforming brittle rule-based greedy methods towards a suite of
  enriched feature vectors with domain knowledge encoding and guardrails

# Otto (formerly Tyto Life) | San Mateo, CA

2017 - 2017

Data Scientist Consultant – Products Division, Home Automation

Head the design, data acquisition, measurement, and pedestrian pattern detection for keyless secure door access control in residential and commercial environments

- Reduced false positive (FP) tracking detections via denoising RF sensory inputs (BLE, Radar) and deployed as on-device ARM target embedded firmware
- Established a new statistical modeling pipeline to diagnose and improve upon the industrial factory unit yield production and factor assembly labor productivity rates

#### **Prior Work Experiences**

•	Inria, Research Assistant – Spatio-Temporal Activity Recognition	2016 – 2016
•	Nagra, Software Expert – Group Incubation & Innovation	2012 – 2015
•	Sportvision, Specialized Consultant – Office of CTO, NASCAR	2011 – 2012
•	Broadcom, Principal Engineer – Systems Engineering	2011 – 2011
•	Qualcomm, Staff Engineer – Computing Enablement	2007 – 2010
•	TapRoot Systems, Principal Engineer – Mobile Products & PS	2003 – 2007
•	Panasonic Mobile, Senior Engineer – Mobile Platforms	2000 – 2003
•	Verizon Wireless, RF Engineer – RF Systems Performance	1999 – 2000

#### **Professional Affiliations**

•	Packt, Content Reviewer – Interpretable & Fair ML	2022 – Present
•	Manning Publications, Content Advisor – Bias in ML	2020 – Present
•	IEEE SA, Committee Member - Ethics of A/IS	2020 - 2022
•	Rutgers Innovation, Advisory Board - Big Data Strategy	2018 – 2020