# ARI KAMLANI

## AI & ML STRATEGY, PRINCIPAL DATA SCIENTIST

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Manhattan, NY



#### EXPERTISE

AI & Machine Learning
Ethical Fairness, Equality (EOP)
Recommender Systems
Natural Language (NLP)
Computer Vision (CV)
Reinforcement Learning (RL)
Experimentation, A/B Testing
AI Infrastructure, MLOps
Strategic Storytelling
Design Thinking
Product Management
Agile/Scrum Methodology

#### **EDUCATION**

BS Electrical Engineering Lehigh University

Wireframes & Prototyping

Credits Forward, MS Data Science
Data ScienceTech Institute

Immersive, Data Science Galvanize

Big Data Strategy
Design Thinking
Rutgers Innovation Center

Product Management Product School

### SUMMARY

Accomplished AI & Machine Learning (ML) professional skilled in leading strategic early-stage personalized responsible machine intelligent solutions and enterprise program initiatives, aligning technology success with business objectives. A crossfunctional leader driving effective decision making, delivering on high-impact value propositions and product strategy, while de-risking product roadmap initiatives.

#### EXPERIENCE

#### IEEE Standards Association (SA) | Global

2020 - Present

Committee Member – IEEE Ethics of Autonomous and Intelligent Systems (A/IS)
Facilitate establishing a product strategy in launching the IEEE AI Experts two-sided
marketplace network, vetting applicants to the demands of seekers, further constructing
requirements, segmented audiences, eligibility assessments, and customer journeys

## ThoughtWorks | Manhattan, NY

2018 - 2020

2017 - 2019

Principal Data Scientist – Professional Services (PS)

Shape machine intelligent portfolio offerings, accelerate early-stage inbound pursuits, grow the AI organizational capabilities, and co-lead numerous discovery workshops

- Led strategic multimodal IR search ranking initiatives (Retriever-Reader multioutput), blending content governance, query disambiguation, and entity linking KB
- Advanced model robustness outcomes across fairness and equal opportunity disparity, attribution reasoning, behavioral testing, and judgement decision codes
- Evolved supply chain lubricant inventory replenishment via safety stock demand forecasting, anomaly detection, and truck packing convex solver constraints

**Pathmind** (formerly Skymind) | San Francisco, CA Deep Learning Engineer Consultant – Solutions Architecture

Create and champion offerings in deep learning (TensorFlow, PyTorch, DL4J), evolving from research to production across structured, NLP, CV, and RL simulation modalities

- Enabled business development in solutions architecture, partnership engagements, benchmarking optimizations, and delivering custom enterprise workshop sessions
- Boosted conversational dialogue high cardinality intent recognition, migrating the encoder from a BiLSTM to a knowledge distilled Transformer Encoder (BERT)
- Matured robust image captioning networks semantically matching NLP query intents to multimodal content, model served by the JVM product infrastructure
- Characterized industrial automotive poor robotic welding joint fusion assembly via development of a residual stochastic CNN (2D/3D) welding detection networks

JP Morgan Chase | Manhattan, NY

2017 - 2018

Data Scientist – Digital Intelligence, Consumer and Community Banking (CCB) Strengthen consumer and small business personalization experience, providing recommendations for Chase Products across the fully governed modeling lifecycle

- Crafted *Ultimate Rewards* loyalty program scalable implicit ranking recommenders encompassing customer redemptions and spending propensity for branded offers
- Partnered with business units to deliver personalized insights, launching card acquisition FOMO message underwriting and targeted ad spending campaigns
- Led efforts in improving suggestive nudges for savings acquisition cash flows via custom neighborhood embedding proximity representation models

#### TECHNOLOGY

Agile PM: Jira, Pivotal Tracker, Basecamp, Airtable, Aha, Miro, Notion, Bugzilla, Trello, Doors

UX Design: InVision, Balsamiq

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

**Visual Analytics:** Tableau, Kibana, Grafana, Prometheus

Public Cloud: AWS, Azure, GCP

ML: TensorFlow, Keras, PyTorch, DL4J, Scikit-learn, RLlib, Gym, Spark, FAISS, Prophet, OpenCV

Fairness, XAI: Lime, Anchor, SHAP, Alibi, IBM AIF360 / AIX360

NLP: Huggingface Transformers, spaCy, NLTK, Gensim, OpenNLP

**Distributed Compute:** Anyscale Ray, Apache Spark, Hive, Hadoop

MLOps: MLflow, DVC, Oozie, Airflow, Docker

**Storage:** Elasticsearch, Solr, MongoDB, Cassandra, Redis, PostgreSQL, MySQL, Neo4J

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

**GitOps:** Git, Perforce, Clearcase, SVN, PVCS, Travis, Jenkins

Compilers, Build Tools: Maven, SBT, Make, GCC, Bazel

## **PATENTS**

Device Localization based on a Learning Model (2017)

Interference Control in Wireless Communications (2016)

## EXPERIENCE (CONTINUED)

## Techstars | Manhattan, NY

2017 - 2017

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

Advise, facilitate design, and scale several seed entrepreneurial startup ventures in acquiring their next round of funding and advancing product roadmap offerings

- Progressed product offerings, accelerating execution across multiple concurrent pilots (20x improvement), further overcoming B2B adoption and design hurdles
- Augmented existing architectures in IIoT Plug & Play NLP extraction data services, computer vision synthetic simulations, and scaling distributive computations

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

2017 - 2017

Data Scientist Consultant – Products Division

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

- Reduced false positive tracking detections via denoising RF sensory inputs (BLE, Radar) with Non-Linear Kalman Filters with device ARM firmware deployment (C)
- Established a new statistical modeling pipeline to diagnose and improve upon the industrial factory unit yield production and factor assembly labor productivity rates

## Inria Research Institute | Sophia Antipolis, France 2016 Research Assistant – STARS (Spatio-Temporal Activity Recognition Systems)

Strengthen computer vision semantic scene healthcare interpretation for the elderly

- Generalized patient spatial semantic tracking zones via temporal link analysis and CNN spatial detections towards learned environments based on behavioral events
- Enhanced ontology scenario recognition patterns, optimizing prior contextual event behavioral states to reduce false positives in localized area tracking zones

## Nagra Kudelski Group | San Francisco, CA

2012 - 2015

2016 - 2016

Software Expert – Group Innovation and Incubation Research Team

Advance technology innovation, pitch new research directives to the executive board, initiate formation of patent and IP proposals, and form strategic partner relationships

- Progressed early-stage technology innovations in digital media fandom entertainment for metadata content authoring and audience companion viewing
- Led technology innovations in low-cost RFID BAP long-range distance (300m+) localization detection tracking pilots in ski resorts, stadiums, and theme parks

## Prior Work Experiences

•	Sportvision, Special Projects Consultant – Office of CTO	2011 – 2012
•	Broadcom, Principal Engineer – Systems Engineering	2011 – 2011
•	Qualcomm, Staff Engineer – Computing Enablement	2007 – 2010
•	TapRoot Systems, Principal Engineer – Mobile Products	2003 – 2007
•	Panasonic Mobile, Senior Engineer – Mobile Platforms	2000 – 2003
•	Verizon Wireless, RF Engineer – RF Systems Performance	1999 – 2000

#### **Professional Affiliations**

<ul><li>IEEE</li></ul>	Ethics of A/IS, Committee Member	2020 – Present
<ul><li>Man</li></ul>	ning Publications, Content Advisor and Reviewer	2020 – Present
<ul> <li>Institution</li> </ul>	ute of Ethical AI & ML, Contributing Member	2019 – Present
<ul> <li>Rutg</li> </ul>	ers Innovation, Advisory Board - Big Data Strategy	2018 – 2020