## ARI KAMLANI

## AI & ML STRATEGY, PRINCIPAL DATA SCIENTIST

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Manhattan, NY

### **EXPERTISE**

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

#### **EDUCATION**

BS Electrical Engineering Lehigh University

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.

#### LEADERSHIP HIGHLIGHTS

## IEEE Standards Association (SA) | Global

2020 - Present

Committee Member – IEEE Ethics of Autonomous and Intelligent Systems (A/IS) Contributing member establishing a product strategy in forming the IEEE AI Experts two-sided marketplace network incorporating the Ethically Aligned Design initiative

Facilitate product strategy on vetting/approving applicants to demands of seekers, constructing surveys, segmented audiences, personas, and customer journeys

## Rutgers Center of Innovation Education | NJ

2018 - 2020

Advisory Board Member – Big Data Strategy

Adjunct Lecturer and Advisor directing the content and curriculum for professionals to further their fluency, investment, and decision making within the Big Data Ecosystem

#### EXPERIENCE

### ThoughtWorks | Manhattan, NY

2018 - 2020

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 blending content governance, query disambiguation, entity linking, and semantic embedding vector analysis
- Calibrated model fairness, equal opportunity disparity, attribution reasoning (SHAP, Integrated Gradients) within mortgage claims, legal, and misconduct allegations
- 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

2017 - 2019

Deep Learning Engineer Consultant - Solutions Architecture

Create, champion, optimize benchmarks, and deliver custom enterprise workshops in deep learning algorithmic and infrastructure offerings within natural language (NLP), computer vision (CV), and reinforcement learning (RL) offerings (DL4J, Pathmind, SKIL)

- Boosted conversational dialogue high cardinality intent recognition, migrating the encoder from a BiLSTM to a knowledge distilled Transformer Encoder (BERT)
- Constructed robust image captioning TensorFlow networks semantically matching NLP query intents to descriptions, natively served by the SKIL JVM runtime
- Characterized industrial automotive poor robotic welding joint fusion assembly via development of a multimodal temporal spatial CNN welding detection networks

#### 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:** 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)

#### **AFFILIATIONS**

IEEE A/IS

Institute of Ethical ML Rutgers Center for Innovation Manning Publications

## EXPERIENCE (CONT'D)

## JP Morgan Chase | Manhattan, NY

2017 - 2018

Data Scientist – Digital Intelligence, Consumer and Community Banking (CCB)
Strongthon consumer and small business personalization experience, providing

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 representation models at scale

## 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 – 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

Software Expert – Group Innovation and Incubation Research Team

Advance technology innovation, pitch new research directives to the executive board, initiate proposals per creation of patents, IP, 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**

1999 - 2012

Sportvision (Office of CTO), Broadcom (Systems Engineering), Qualcomm (Enablement), TapRoot Systems (Mobile Products), Panasonic (Mobile Platforms), Verizon (RF Planning)