# ARI KAMLANI

# **Data Scientist | Principal Engineer | Technology Strategist**San Francisco, CA

Data Scientist/Machine Learning Engineer, Principal Engineer skilled in delivering strategic large-scale and early-stage projects, with particular attention to alleviating pain points, improving experiences, deriving business insights, and expressing engaging narratives. Experienced in driving new strategic business initiatives, producing R&D POC designs, and scaling machine learning experiments.

#### **TECHNICAL SKILLS**

- Apache Spark, Hadoop, Hive
- Elastic Search (ELK), Apache Solr
- Cassandra, MongoDB, Neo4j
- Postgres, MySQL
- IBM SPSS, BigInsights, Bluemix
- SAS Enterprise Miner, Visual Analytics
- Git, Perforce, ClearCase, SVN, PVCS
- JIRA, Pivotal Tracker, Bugzilla, Doors

- DL4J, TensorFlow, PyTorch, ONNX, Keras
- Spacy, NLTK, OpenCV
- Sklearn, H20
- Jupyter, Zeppelin, RStudio
- IntelliJ, Eclipse, Spyder, IPython
- AWS, MSFT Azure, Google GCP
- Flask, Play Framework
- Tableau, D3.js, p5.js, Plotly

- Scala, Java, Python, R, SQL, C, C++, UML, ARM
- JavaScript, Node.js
- HTML, CSS
- Bootstrap, Jekyll
- Maven, SBT
- Linux, QNX, WinCE

#### **PATENTS**

Interference Control in Wireless Communication; United States 9,357,404 | Issued
 Device Localization Based on a Learning Model; United States 14/311,077 | Filed
 June 2014

# **EDUCATION/CERTIFICATIONS**

Rutgers Innovation (New Brunswick, NJ)   Design Thinking Professional Program	June 2019
Rutgers Innovation (New Brunswick, NJ)   Big Data Professional Program	May 2019
Udacity (Online)   Self-Driving Car (SDC) Nanodegree (1+ Terms)	Nov 2016 – Apr 2017
Galvanize (San Francisco, CA)   Data Science Immersive Bootcamp	Jun 2016 – Aug 2016
Data ScienceTech Institute (Paris, France)   MS Data Science (Select Courses)	Oct 2015 – May 2016
Lehigh University (Bethlehem, PA)   B.S. Electrical Engineering (EE)	Aug 1995 – May 1999

#### **ADVISORY BOARDS**

Rutgers University Center of Innovation Education | Big Data Professional Program Oct 2018 – Present

## **EXPERIENCE**

#### ThoughtWorks | Manhattan, NY

Principal Data Scientist - Professional Services

Responsible for accelerating new and existing Client Data & Al Opportunities, shaping ThoughtWorks Data Portfolio Offerings in Platforms and Intelligent Applications. Translate business expectations and requirements from key client stakeholders into applied data-driven predictive and prescriptive outcomes, furthermore, fostering a culture of experimentation and innovation.

- Advise on Data Strategy, Design, Architecture, and Technology selection in modernizing and transforming Data
   ML Platforms, Products & Services, prioritizing technical tradeoffs and debt with business objectives
- Advise on Content Governance for producing continuous high-fidelity training data for Modeling & Analysis
- Lead Contextual Machine Intelligence Solutions per Natural Language Processing (NLP) use cases such as Contextual Enterprise Search, Document Classification & Clustering
- Collaborate with Demand/Sales on early-stage Client Pursuits to gain new Data Project Streams of work, improving the Portfolio and Revenue Earnings
- Engage in Assessment and Discovery Workshops, followed by Professional Services Delivery Engagements, aligning technical delivery with expectations and business outcomes
- Guide strategic technical assessments in facilitating client acquisition, technical feasibility and maturity

Sep 2018 – Present

## Skymind | San Francisco, CA

May 2017 - Present

Deep Learning Engineering Consultant – Solutions Architecture

Responsible for improving the Deep Learning for Java (DL4J) Algorithm Suite, Skymind Intelligence Layer (SKIL) Model Platform, and Enterprise Client Portfolio

- Facilitate Business Development and Enterprise Customer Technical Architecture Client Engagements
- Present and create tailored DL4J suite learning content for Enterprise partner vendor and public workshops
- Develop Deep Learning vendor engagement feasibility studies per improving existing POC implementations for industrial automotive multimodal computer vision welding detection event scenarios
- Develop POC JVM modules demonstrating the Skymind Intelligence Layer (SKIL) Model Serving capabilities, deploying native TensorFlow trained temporal image networks

## JP Morgan Chase (JPMC) | Manhattan, NY

*Nov 2017 – Aug 2018* 

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

Responsible for improving the consumer personalization experience and recommended insights for Chase Products across the full model management lifecycle, from experimentation to launch, including Data Governance aspects

- Develop scalable implicit ranking recommendation ML Tuned Models (via Apache Spark, Scala, ML Pipelines) for Chase Ultimate Rewards encompassing spending propensity and latent factor likewise redemptions
- Engage with LOB's to deliver personalized insights, launching and monitoring deployed Chase card acquisition message underwriting and targeted ad spending-based Campaigns
- Improve the suggestive Nudges for Savings Acquisition and Engagement towards customer financial health

## Techstars | Manhattan, NY

*July 2017 – Oct 2017* 

Technologist in Residence (TIR) – IoT Accelerator Vertical

Responsible for advising several Entrepreneurial Ventures in advancing their Pilot & Product IoT/M2M designs

- Advance company product offerings via solving or reducing bottlenecks and pain points in their data pipeline, further allowing for execution across multiple concurrent pilots
- Advise companies in systems architecture, benchmarking and scaling (via Apache Spark) their solution
- Lead technical company mentoring sessions and weekly group discussions

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

Mar 2017 – Jun 2017

Data Scientist & Engineering Advisor/Consultant – Product Division

Responsible for enhancing the Connected Keyless Home Access Control consumer experience

- Drive data acquisition, measurement, and data strategy for secure sensor (BLE, Radar) door access, consisting
  of off-device (Python) and on-device deployment firmware (C) via ARM Cortex-M CMSIS DSP Library
- Improve pedestrian detection confidence via denoising and smoothing RF sensory inputs via Kalman Filters
- Provide ETL and aggregate statistical analysis per factory unit yield production and productivity rates

# Inria Research Institute | Sophia Antipolis, France

Jan 2016 – Apr 2016

Research Assistant – STARS (Spatio-Temporal Activity Recognition Systems) Research Team

Responsible for improving Computer Vision semantic scene interpretations per healthcare diagnosis for the Elderly

- Applied traditional Computer Vision techniques and Deep Learning CNN architectures per segmented region classifications for semantic ontology event activity recognition representations and analysis
- Enhanced event scenario recognition models resulting in improved accuracy detection, reducing false positives via accounting for relaxed temporal constraints and prior contextual states
- Improved classification object detection inference via model layer architecture fine-tuning and optimizations

# Nagra Kudelski Group | San Francisco, CA

Sep 2012 – May 2015

Software Expert – Group Innovation & Incubation

Responsible for future technology & application advancements within an agile R&D Innovation Group

- Initiated proposals per Intellectual Property (IP), creation of patents, and formation of new business units
- Successfully executed special project research technology directives to assess portfolio value-add
- Formulated new strategic partner vendor relationships to strengthen Digital TV and Public Access sectors
- Led POC low-cost RFID BAP long-range distance detection (100m+) designs in theme parks and ski resorts

#### Sportvision | Mountain View, CA

Oct 2011 - Apr 2012

Special Projects/Embedded Software Consultant – Office of CTO, Motorsports Division

Responsible for advising enhancements of NASCAR Trucks Vehicle Tracking prototype per broadcast media

- Advised the vehicle tracking and sensory measurement migration from Computer Vision detection to GPS IMU enabled localization to improve accuracy during challenging weather conditions
- Successfully delivered a customized Embedded Linux Kernel and Root Filesystem (RFS) distribution to improve stability and performance of predecessor system, notably reducing system crashes, latency, and boot-time
- Introduced new mechanisms per critical health diagnostic detection and image upgrades during race day

## Broadcom | Sunnyvale, CA

Feb 2011 – Oct 2011

Principal Engineer – Systems Engineering, Cellular Division

Responsible for WiMAX and LTE radio network driver systems software architecture mobile reference designs

- Directed technology teams per mobile platform processor architectures, requirements and integration of vendor Voice over LTE (VoLTE) stack in aligning with product roadmap features
- Led multi-site WiMAX Certification vendor migration platform architecture from Linux to QNX

# Qualcomm | Raleigh, NC

*Aug 2007 – Jan 2010* 

Staff Engineer - Computing & Consumer Division

Responsible for Windows Mobile board support package (BSP) Snapdragon ARM Cortex based reference designs

- Initiated cross-disciplinary technology reviews to assess and improve BSP reference architecture designs
- Enhanced systems performance initiatives, further optimizing boot time, performance monitors, and latency
- Advised OEMs in reference design architecture, feature development, and Windows Mobile Logo Certification

# **Additional Prior Experiences:**

TapRoot Systems (Morrisville, NC) | Principal Engineer/Lead – Mobile Products & ServicesJul 2003 – Aug 2007Panasonic Mobile Communications (Suwanee, GA) | Senior Engineer – Mobile PlatformsApr 2000 – Jul 2003Verizon Wireless (Plymouth Meeting, PA) | RF Engineer – Systems PerformanceSep 1999 – Feb 2000