### ARI KAMLANI

# **Data Scientist | Principal Engineer | Technology Strategist**Manhattan, NY

Data Scientist, Machine Learning Engineer, Principal Engineer skilled in delivering strategic early-stage and large-scale projects, with particular attention to alleviating user and technology driven pain points, improving product 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, RLlib, Ray
- Spacy, NLTK, OpenCV, Sklearn, H20
- Jupyter, Zeppelin, RStudio
- IntelliJ, Eclipse, PyCharm
- 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 10075963

Device Localization Based on a Learning Model; United States 9681270

## May 2016

June 2017

## **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

Sep 2018 – Present

#### **EXPERIENCE**

#### ThoughtWorks | Manhattan, NY

Principal Data Scientist - Professional Services

Responsible for accelerating new and existing client Data & AI Opportunities, shaping ThoughtWorks data portfolio offerings and capabilities in Machine Intelligent applications and infrastructure. 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.

- Facilitate the data and machine learning strategy, design, architecture, and technology selection in modernizing customer initiatives in healthcare, retail, oil & gas, enterprise security, and health & wellness industries
- Advise the development of improving contextual machine intelligence solutions per Natural Language
   Processing (NLP) use cases such as contextual enterprise search, document classification & clustering
- Collaborate with customer content governance divisions for delivering continuous high-fidelity training data for improving model & analysis performance
- Co-develop numerous discovery and assessment client strategy workshops, followed by professional service delivery engagements, aligning technical delivery with customer expectations and business outcomes
- Guide customer strategic technical assessments in client acquisition, technical feasibility and maturity, prioritizing technical tradeoffs and debt with business objectives
- Collaborate with demand & sales on early-stage client pursuits to initiative new data and machine learning project opportunities, improving the NA portfolio and revenue earnings

#### 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 Infrastructure Platform, Pathmind Deep Reinforcement Learning Service, and Enterprise Client Portfolio

- Facilitate Business Development and Enterprise Technical Architecture Client and Partnerships 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 and service roadmap offerings, accelerate the execution across multiple concurrent customer pilots, and reduce technology and user performance bottleneck pain points
- Advise companies in systems architecture, benchmarking and scaling (via Apache Spark) their solution
- Led 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 machine learning 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 via model architecture fine-tuning and model architecture optimization

## Nagra Kudelski Group | San Francisco, CA

Sep 2012 – May 2015

Software Expert – Group Innovation & Incubation

Responsible for developing 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 and developing enhancements to NASCAR Trucks Broadcast Media Vehicle Tracking

- 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
- Developed new subsystems for critical health diagnostic detection and OTA 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 for mobile reference designs

- Directed technology teams per mobile platform processor architecture, requirements and integration of Voice over LTE (VoLTE) radio stack into reference designs and customer product roadmaps
- Led multi-site WiMAX Certification vendor (RIM) migration OS platform architecture from Linux to QNX

#### Qualcomm | Raleigh, NC

*Aug 2007 – Jan 2010* 

Staff Engineer - Computing & Consumer Division

Responsible for improving the launch, development, and engineering releases of 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 – Mobile Products & Services

Panasonic Mobile Communications (Suwanee, GA) | Senior Engineer – Mobile Platforms

Verizon Wireless (Plymouth Meeting, PA) | RF Engineer – Systems Performance

Jul 2003 – Aug 2007

Apr 2000 – Jul 2003

Sep 1999 – Feb 2000