

## ARI KAMLANI

**Data Scientist / Technical Advisor / Principal Engineer**

San Francisco, CA

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*Data Scientist, Principal Engineer* skilled in delivering strategic large-scale and early-stage projects, with particular attention to alleviating pain points and deriving business insights. Experienced in driving new strategic business initiatives, developing client/vendor engagements, and delivering R&D POC designs. Proficient in building end-to-end distributed machine learning pipelines, comprised of processing both structured and unstructured data.

### TECHNICAL SKILLS

#### Enterprise/Tools

- Apache Spark, Hadoop
- AWS EC2, EMR, S3
- SAS Enterprise Miner, Visual Analytics
- IBM BigInsights, SPSS, Bluemix, Watson
- Git, Perforce, ClearCase, SVN, PVCS
- Pivotal Tracker, Doors, Bugzilla

#### Data Analysis/Frameworks

- Postgres, MySQL, SQLite, MongoDB
- Jupyter, Zeppelin, RStudio, Rodeo
- IntelliJ, Eclipse, Spyder, IPython
- Sklearn, NLTK, GraphLab, OpenCV
- DL4J, TensorFlow, Keras
- D3.js, p5.js, Plotly

#### Programming/Platforms

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

### PATENTS

- Interference Control in Wireless Communication; United States 9,357,404 | Issued May 2016
- Device Localization Based on a Learning Model; United States 14/311,077 | Filed Jun 2014

### EDUCATION/CERTIFICATIONS

Udacity Self-Driving Car (SDC)   Online   Nanodegree Program (1+ Terms)	Nov 2016 – April 2017
Galvanize   San Francisco, CA   Data Science Immersive Bootcamp	Jun 2016 – Aug 2016
Data ScienceTech Institute (DSTI)   Paris, France   MS Data Science (Select Courses)	Oct 2015 – May 2016
General Assembly   San Francisco, CA   Part-Time Data Science Program	Oct 2014 – Dec 2014
Lehigh University   Bethlehem, PA   B.S. Electrical Engineering (EE)	Aug 1995 – May 1999

### EXPERIENCE

#### JP Morgan Chase (JPMC) | New York City, NY

Nov 2018 – Present

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

Responsible for improving the personalization experience across Chase Products and Services

- Develop scalable implicit recommendation ML Models (via Apache Spark) for *Chase Ultimate Rewards* based on spending behavior and latent factor likewise redemptions promoting user experience and decreasing cost
- Engage with LOB's to deliver personalized engagement insights and launch Chase card acquisition message underwriting and targeted ad spending-based *Campaigns*
- Establish common scalable components (Scala, Spark) to be used across Chase machine learning platforms

#### SkyMind | San Francisco, CA

May 2017 – Present

*Deep Learning Consultant – Field Engineering, Training*

Responsible for improving the Deep Learning for Java (DL4J) Suite for Public and Enterprise consumption

- Develop Vendor engagement feasibility studies per improving existing Deep Learning implementations for Industrial Automotive computer vision detection and tracking event scenarios
- Develop client applications to demonstrate the SkyMind Intelligence Layer (SKIL) Model Serving capabilities from deployed native CNN and LSTM TensorFlow trained models for a large Home-Repair retailer vendor
- Create and present Training material per Partners and Conferences, further engaging with the community and offering a more informative product offering takeaway

**Techstars IoT | New York City, NY***July 2017 – Present**Technologist in Residence (TIR)*

Responsible for advising several Accelerator Venture Companies in advancing their Pilot and Product designs

- Lead Technical Company Mentoring Sessions and Weekly Group Discussions
- Advise companies in Systems Architecture, Benchmarking and Scaling (via Apache Spark) their solution
- Advance Company Product Offerings via solving or reducing bottlenecks and pain points in the Data Pipeline, further streamlining their solution to reduce errors and executing on multiple concurrent pilots

**Otto (Tyto Life) | San Mateo, CA***Mar 2017 – Jun 2017**Data Scientist & Engineering Advisor – Product Division*

Responsible for enhancing the Connected Home Access Control consumer experience

- Drive data acquisition, measurement, and data science strategy for sensor (BLE, Radar) data across a variety of unit installation environments. Initial analysis is performed off-device (Python) while deployment is implemented on-device in firmware (C) via use of ARM Cortex-M (CMSIS) DSP library.
- Improve device/pedestrian detection confidence via denoising and smoothing RF sensory inputs
- 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 region inference via model architecture fine-tuning and optimization

**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 Proof of Concept (POC) designs centered around long-range distance detection, achieving similar results to Active RFID (100m+) via a disposable low cost Battery-Assisted Passive (BAP) RFID design

**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 customized Embedded Linux Kernel and Root Filesystem (RFS) distribution to improve stability and performance of predecessor system, notably reducing 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
- Facilitated multi-site coordination per vendor migration platform architecture from Linux to QNX to achieve successful WiMAX Certification

**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 multi-site technology reviews to assess processor requirements, identify next generation features, and improve upon current reference design implementations
- Advised OEMs in reference design architecture, custom BSP feature development, and best practices in achieving Third-Party Windows Mobile OS Logo Certification
- Enhanced systems performance initiatives, further optimizing boot time, performance monitors, and latency

**Additional Prior Experiences:**

TapRoot Systems | Morrisville, NC | Principal Engineer/Lead – Mobile Products &amp; Services

*Jul 2003 – Aug 2007*

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

*Apr 2000 – Jul 2003*

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

*Sep 1999 – Feb 2000*