

# ARI KAMLANI

DATA SCIENTIST | PRINCIPAL ENGINEER

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San Francisco, CA

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*Data Scientist, Principal Engineer, Researcher* skilled in delivering strategic large-scale and early-stage projects, with particular attention to alleviating user and technology pain points. Experienced in driving new strategic business initiatives, delivering R&D POC designs, and developing client/vendor engagements.

## EDUCATION

Udacity Self-Driving Car (SDC)   Online   Nanodegree Program	Nov 2016 – Jul 2017
Galvanize   San Francisco, CA   Data Science Immersive Bootcamp	Jun 2016 – Aug 2016
Data ScienceTech Institute (DSTI)   Paris, France   Part-Time Data Scientist Program	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

## TECHNICAL SKILLS

### **Distributed Systems, Enterprise**

- Apache Spark, Hadoop, MapReduce
- SAS Enterprise Miner, Visual Analytics
- IBM BigInsights, SPSS Modeler
- AWS EC2, EMR, S3
- IBM Bluemix, Watson

### **Data Analysis**

- Postgres, MySQL, SQLite, MongoDB
- Jupyter, Zeppelin, RStudio, Rodeo
- IPython, IntelliJ, Spyder, Eclipse
- Sklearn, NLTK, GraphLab, OpenCV
- TensorFlow, Keras

### **Programming**

- Python, Scala, R, SQL
- C, C++, ARM, UML, OCL
- JavaScript, Squirrel
- HTML, CSS, Markdown
- D3.js, Bootstrap, Jekyll

## 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

## EXPERIENCE

### **Galvanize | San Francisco, CA**

Jun 2016 – Aug 2016

#### *Data Science Fellow – Immersive Bootcamp Program*

Practical immersive program concentrating on data science pipelines and machine learning algorithms via Python

- Successfully delivered [Cooper Hewitt](#) capstone project providing insights into visitor tracking behavior patterns utilizing graphical network analysis (Apache Spark GraphX/GraphFrames) and hierarchical clustering algorithms
- Developed peer case studies regarding fraud detection, churn prediction and recommendation engines
- Applied industry standards methods in machine learning algorithms, natural language processing, distributed systems, statistical analysis, and experimental design

### **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/zone classification for semantic ontology event representation and analysis
- Improved scenario activity recognition model temporal pattern irregularities via accounting for prior window contextual sequences
- Enhanced event recognition models resulting in improved accuracy detection and reduced false positives

**Nagra Kudelski Group | San Francisco, CA***Sep 2012 – May 2015**Software Expert – Group Innovation & Incubation*

Responsible for future technology &amp; application advancements within an agile R&amp;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 on long-range distance detection, achieving similar results to Active RFID 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

- Evaluated and recommended alternative SoC peripherals and staged implementation performance methods in migration from Computer Vision detection to a GPS localization and additional sensor measurements
- 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 mechanisms per critical health diagnosis detection in the field and update images 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 roadmap features
- Managed multi-site coordination per customer (RIM) 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 custom feature development and certification aspects
- Enhanced systems performance initiatives, further optimizing boot time, performance monitors, and latency

**Previous 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***Additional Skills***Project/Requirements Mgmt*

Agile Scrum (Pivotal Tracker), Doors

*SCM/Tracking*

Git, Perforce, ClearCase, ClearQuest, SVN, PVCS, Bugzilla

*Platforms/OS*

Linux/Unix, Android, Mac OS X, Windows/Windows Mobile/WinCE