# ARI KAMLANI

## DATA SCIENTIST | PRINCIPAL ENGINEER

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San Francisco, CA

Data Scientist, Principal Engineer, 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 | Nov 2016 – July 2017 (Active) | Nanodegree Galvanize | San Francisco, CA | Jun 2016 - Aug 2016 | Data Science Immersive Bootcamp Data ScienceTech Institute (DSTI) | Paris, France | Oct 2015 - May 2016 | Part-Time Data Scientist Program General Assembly | San Francisco, CA | Oct 2014 – Dec 2014 | Part-Time Data Science Program Lehigh University | Bethlehem, PA | Aug 1995 - May 1999 | B.S. Electrical Engineering (EE)

## **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

Device Localization Based on a Learning Model; United States 14/311,077 | Filed

May 2016 June 2014

#### **EXPERIENCE**

#### Galvanize | San Francisco, CA

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

*June 2016 – Aug 2016* 

Part-Time 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

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 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

Sep 2012 – May 2015

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
- 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 | July 2003 – Aug 2007 | Principal Engineer/Lead – Mobile Products & Services Panasonic Mobile Communications | Suwanee, GA | Apr 2000 – July 2003 | Senior Engineer – Mobile Platforms Verizon Wireless | Plymouth Meeting, PA | Sep 1999 – Feb 2000 | RF Engineer – Systems Performance

#### **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