ARI KAMLANI
Data Scientist | Technology Advisor | Principal Engineer
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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, deriving business insights, and simplifying complex systems. Experienced in driving new strategic business initiatives, developing client/vendor engagements, and producing 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	*Data Analysis/Frameworks*	*Programming/Platforms*
Apache Spark, Hadoop	Postgres, MySQL, SQLite, MongoDB	Scala, Java, Python, R
AWS EC2, EMR, S3	Jupyter, Zeppelin, RStudio, Rodeo	SQL, C, C++, ARM, UML
SAS Enterprise Miner, Visual Analytics	IntelliJ, Eclipse, Spyder, IPython	HTML, CSS, Markdown
IBM BigInsights, SPSS, Bluemix, Watson	Sklearn, NLTK, GraphLab, OpenCV	JavaScript, Node.js
Git, Perforce, ClearCase, SVN, PVCS	DL4J, TensorFlow, Keras	Bootstrap, Jekyll
Pivotal Tracker, Doors, Bugzilla	D3.js, p5.js, Plotly	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 2017 – Present*
Data Scientist – Digital Intelligence | Consumer and Community Banking (CCB)
Responsible for improving the consumer personalization experience and suggestive nudges for Chase Products
- Develop scalable implicit recommendation ML Models (via Apache Spark and ML Pipelines) for *Chase Ultimate Rewards* via spending propensity and latent factor likewise redemptions, influencing business decisions
- Engage with LOB's to deliver personalized engagement insights, launch and monitor deployed Chase card acquisition message underwriting and targeted ad spending-based *Campaigns*
- Establish scalable module platform reusable components (via Scala, Spark), encompassing tracking of data lineage across the analytical pipeline

Skymind | San Francisco, CA   *May 2017 – Present*
Deep Learning Consultant – Field Engineering, Training Education
Responsible for improving the Deep Learning for Java (DL4J) Suite for Public and Vendor consumption
- Develop Vendor engagement feasibility studies per improving existing Deep Learning POC implementations for Industrial Automotive computer vision detection event scenarios
- Develop client POC applications to demonstrate the Skymind Intelligence Layer (SKIL) Model Serving capabilities from deployed CNN and LSTM native TensorFlow trained models for a large Home-Repair retailer vendor
- Present and create tailored learning DL4J Suite content for Enterprise Partner Vendors and Public Workshops

Techstars | New York City, 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
- 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 their 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 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 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 a 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 & 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*