

SAN FRANCISCO, CA. USA +1 (415) 926-1221

DATA SCIENTIST ♦ TECHNOLOGIST ♦ STRATEGIST

Group Incubation & Innovation ★ Research

Solutions-oriented Technologist transitioned to *Data Scientist* with 15+ years of overall experience developing innovative engineering solutions, formulating strategic opportunities, providing technology assessment, Proof of Concept (POC) designs, and independent research. Skilled in providing effective leadership in fast-paced, deadline driven environments through clear communication that fosters a client focused environment. Superior hands-on technical capabilities combined with a proven history of success at delivering large-scale challenging projects. Articulate communicator with strong written and verbal interpersonal skills, working closely with clients to maximize goals.

SELECTED HIGHLIGHTS

- Strong focus on alleviating user and technology pain points for new advancements and ideation
- Initiate new project proposals to executive board for formation of new business units
- Create new strategic partner relationships to facilitate project development
- Engage in Cross-disciplinary Technical Reviews
- Develop new initiatives to optimize end-to-end systems communication performance

EDUCATION

Galvanize - San Francisco, CA

Data Science Immersive Bootcamp (Jun 2016-Aug 2016) Program

Data ScienceTech Institute (DSTI) – Paris, France

Part-Time Data Scientist Designer (Oct 2015-May 2016) Program

General Assembly - San Francisco, CA

Part-Time Data Science (Oct 2014 – Dec 2014) Program

Lehigh University - Bethlehem, Pennsylvania

Bachelor of Science in Electrical Engineering (1999)

Select Recent Trainings (Paris, France):

Distributed Computing with Apache Spark (1.6.1) - Focused on Scala IBM Analytics Ecosystem SAS Enterprise Miner, Visual Analytics

MOOC Certifications:

Scalable Machine Learning (Apache Spark - PySpark): (edX, 2015)
Enabling Technologies for Data Science and Analytics - The Internet of Things: (edX, 2016)

Independent Coursework/Workshops:

Big Data, Data Science, Machine Learning, Artificial Intelligence, Sabermetrics Creativity & Innovation, Idea Incubation, Design Thinking

NOTABLE PROJECTS

Inria Research Institute → Sophia Antipolis, France → Jan 2016 – Mar 2016

French research institute specializing in Computer Science and Automation

Part-Time Research – STARS (Spatio-Temporal Activity Recognition Systems) Research Team

Computer vision Semantic Scene interpretation per preventive care and diagnosis for the elderly.

- Improve event recognition models of manually identified zones in the home
- Improve structure interpretation of missing ground truth scenarios

PROFESSIONAL EXPERIENCE

Nagra Kudelski Group → San Francisco, CA → 2012-2015

Leader in digital television, digital security, and public access control

Software Expert - Group Innovation

Technologist within R&D Innovation Group responsible for future Technology and Application Advancement, with the group reporting directly to the owner.

- Created project proposals and presentations to present to executive board, drawing on research findings, best practices and collaborative ideas from a team with diverse expertise.
- Brainstormed new ideas in relation to Intellectual Property (IP), creation of Patents, and formation of new business units.
- Executed multiple future generation technology research and assessment special project directives requested via the owner.
- Formulated new strategic Partner Vendor relationships to strengthen selected projects.
- Led Proof of Concept (POC) designs centered around low cost Long Range People Tracking. Design was focused
 on achieving the Active RFID range benefits with a Battery-Assisted Passive (BAP) RFID design, in a disposable
 low cost form factor.

SPORTVISION → Mountain View, CA → 2011-2012

Leader in sports technology and broadcast media entertainment products and solutions

Embedded Software Consultant - Motorsports Division

Special Projects Consultant reporting to office of CTO for Motorsports (NASCAR Trucks) division, advising in the development of vehicle tracking, local base station communication, and sensor measurement.

- Successfully developed custom in-house Embedded Linux Kernel (2.6.35) and root filesystem distribution.
- Achieved enhanced communication signaling between OMAP (OMAP3530) and AVR (Atmel).
- Decreased system boot time and improved system stability issues.
- Designed a custom feature that allowed for remote update images in Flash.

Broadcom ♦ Sunnyvale, CA ♦ 2011

From acquisition of Beceem Communications – Cellular division specializing in WiMAX and LTE

Principal Engineer - Systems Engineering, Cellular Division

Responsible for WiMAX and LTE radio network driver systems software architecture mobile reference designs.

- Directed platform requirements, architecture, and integration of vendor Voice over LTE (VoLTE) stack into reference design platforms (BCM21890, BCM Capri).
- Managed customer (RIM) migration platform architecture (OMAP 3530, 4430) from Linux to QNX.
- Led multi-site customer and group project management task coordination.
- Guided technology teams per next generation mobile platform processor architecture and requirements.

Qualcomm ★ Raleigh, NC ★ 2007-2010

Large international designer and manufacturer of next-generation digital mobile technologies

Staff Engineer - Computing and Consumer Product Division

Responsible for Windows Mobile (6.1/7) board bring-up and board support package (BSP) reference design software for the Snapdragon ARM Cortex architecture processors.

- Collaborated with multi-site technology teams to access processor requirements, develop new features, and integrate software from predecessor baselines. Engaged in cross-disciplinary technical reviews to improve upon hardware defects and timing issues.
- Delivered systems performance initiatives, e.g. boot time, system load ordering, perform monitors and latency.
- Enhanced feature development for the kernel, bootloader, device drivers and sensor slave devices.
- Advised OEMs in custom feature development and successfully achieving certification requirements.

TapRoot Systems ♦ Morrisville, NC ♦ 2003-2007

Provider of embedded software, specializing in Telephony, Wi-Fi, and BSP reference design services

Principal Engineer/Technical Lead – Mobile Products and Services

Responsible for leading early mobile Wi-Fi (802.11 a/b/g) wireless stack and BSP reference design deliverables.

- Delivered multiple OEM certified (Wi-Fi Alliance) secure (802.1x, WPA, WPA2) wireless stack designs and integration into the Symbian reference design for various Wi-Fi peripherals.
- Led Qualcomm reference design Windows Mobile service contract system software and subsystem deliverables (GPS, AP/BP communication, SD/SDIO) for the MSM7200/7500 processor series.
- Facilitated business development activities with OEM Presales support, reviewing Statement of Works (SOWs), and supporting RFI/RFP efforts.
- Strengthened cross-project process improvement initiatives, assisted in vendor and tool selections

Additional Experiences:

Panasonic Mobile Communications, Suwanee, GA: 2000-2003, Senior Software Engineer - Mobile Platforms Verizon Wireless, Plymouth Meeting, PA: 1999-2000, RF Systems Performance Engineer

TECHNICAL SKILLS	
Desktop Applications	Microsoft Office, Libre Office
Frameworks	Bootstrap, Foundation, Jekyll
OOD Modeling	UML, OCL
Project Management	Agile Scrum (Pivotal Tracker)
Requirements Management	Doors
SCM/Tracking Applications	Git, Perforce, ClearCase, ClearQuest, SVN, PVCS, Bugzilla, PVCS
Distributed Systems	Apache Spark (1.6.1)
Data Analysis	Jupyter (IPython), Yhat Rodeo, R Studio, Zeppelin
SAS	SAS Enterprise Miner, SAS Visual Analytics
Databases	SQLite, PostgreSQL, MySQL,
Programming	C, C++, Python, R, Scala, Javascript, Perl, Squirrel, SQL, HTML, CSS, ARM, VHDL
Operating Systems	Linux/Unix, QNX, Nucleus Plus, Windows Mobile, WinCE, Symbian
IDE/ICE	Eclipse, IntelliJ, Spyder, GDB, Trace32 Lauterbauch, QNX Momentics IDE, Microsoft
	Visual Studio, Platform Builder, ARM Development Suite, Rational Rose RT,
	CodeWarrior

ADDITIONAL CREDENTIALS

PATENTS

- Interference Control in Wireless Communication; United States 13/887,039
 (Filed: 05/03/2013)
- Device Localization Based On a Learning Model; United States 14/311,077 (Filed: 06/20/2014)