Faris B. Mismar

(214) 912-3263
Plano, TX 75025
https://www.linkedin.com/in/farismismar
faris.mismar@ieee.org

Director, Principal Machine Learning Scientist

An accomplished leader with 15+ years of experience in wireless communications including leading others and 2+ years of experience in machine learning in creating and selling products and services. Excellent project leadership and communication skills. Proven track of interfacing and consulting with executives.

Core Competencies: Consultative Sales ■ Project Leadership ■ Innovation ■ Presentation Skills ■ Conflict Management ■ Problem Solving ■ Machine Learning ■ Software Development ■ 3gpp RAN Standards

Professional Experience

Jio, Frisco, TX **2018-Present**
Director – Product and Technology Development 2018-Present

- Responsible for the 5G NR development paths forward with focus on Massive MIMO and Multi-access Edge Computing (MEC) products customization and vendor management.
- Working on employing advanced machine learning techniques in our all 4G LTE radio network using Python and teaching engineers and technology managers the techniques required to do so.
- With my team, we made it to the two finalists in the machine learning hackathon (out of 9,107 participants).

ERICSSON, Plano, TX **2009-2018**
Solutions Manager II – RAN and Machine Learning 2015-2018

- Served as machine learning authority role at Ericsson, Business Area Digital Transformation.
- Provided sales support for customers both in North America and around the globe. Examples of involved verticals: energy controllers, transport and logistics, and telcos (products and services).
- Developed algorithms using machine learning (supervised and unsupervised) to create actionable insights for several high visibility customer use cases. Use cases spanned traditional telecommunication cases, end-user experience, and IoT.
- Designed and built an engine for predictive data analytics using machine learning for several operators and enterprise customers using Python 3 and TensorFlow on highly scalable environments.
- Familiar with Agile principles and software development lifecycle.
- Delivered presentations in several Ericsson workshops held globally for machine learning (algorithms, platforms, and XaaS).
- Key contributor to the Ericsson v Apple global patent litigation (UMTS and LTE radio access standards). Press release on Dec 21, 2015 has settlement details.
- Last day of work: November 10, 2017. Last day on payroll: Februrary 8, 2018.

Solutions Manager II – RAN 2013-2015

- Interfaced with CTOs and CTO teams from several customers and CUs on NDO topics.
- Functioned as technology authority for new technology introductions: eMBMS (NPO in Netherlands) and 5G NR testbed (AT&T).
- Chaired the Outdoor Heterogeneous Networks Experts Forum global initiative (15 members).
- Performed Customer Solutions role in a very high visibility LTE KPI RFP response acceptance, and contract negotiation (NDO) in Indonesia (XL Axiata) to improve Ericsson's O2C process efficiency without compromising on the LTE network quality.

- Authored an internal process document which helped win and deliver the service of identifying businesses closest to strands for a leading multi-system operator (MSO) as part of their public Wi-Fi hotspot deployment plan.
- Operated as a Consultant for the solution on Heterogeneous Networks strategic planning and design (NDO) to C-suite customers in Australia (VHA) and Saudi Arabia (Mobily).
- Performed SON-OM KPI analysis and reporting to Verizon for a 10 MHz LTE cluster on 700 MHz and AWS bands.
- Generated sales leads and performed sales support (costing and pricing and presentations).
- Engaged as a speaker in several global knowledge sharing events (Centra sessions).
- Delivered training for in-building solutions (IBS) design using iBwave and capacity dimensioning for HSPA+ and LTE in many countries: USA, Spain, Australia, and India.
- Spoke in several workshops held globally for heterogeneous networks (products, services, and pre-sales).

Solutions Architect III – RAN 2011-2013

- Certified senior member of Competence Domain RAN, Network Design and Optimization (NDO) Global Competence Hub, Global Services.
- Executed Customer Solutions Responsible (CSR) role for one small-track project with SaskTel Canada.
- Consulted with operators on LTE spectrum bidding (700 MHz vs 2600 MHz).
- Identified and qualified sales opportunities.
- Performed RF capacity planning and forecast for LTE (including VoLTE), HSPA+, and Wi-Fi.
- Developed small cells strategy and planning for AT&T.
- Conducted technical pre-sales customer engagements with AT&T and other accounts.
- Led global teams of varying seniority levels, backgrounds, geographical locations, and cultures.
- Authored technical guidelines and white papers on small cells, connected devices, and smartphones.
- Tuned and optimized an LTE cluster (10 MHz; 700 MHz and 2100 MHz) in AT&T.
- Participated as a speaker in global and regional knowledge sharing events.
- Subject Matter Expert and Business Builder for Ericsson in Mobile World Congress 2013.

RF Services Engineer IV 2009-2011

- Facilitated the Stay Green initiative as the Regional Lead.
- Interfaced with AT&T executives and market managers on special events.
- Led the RF design for the Dallas Cowboys Stadium for AT&T HSPA+ radio coverage.
- Collaborated with AT&T Labs on WCDMA RF capacity modeling.
- Led a team to help improve an internal trace analysis tool.
- Led pre-sales effort for high-profile projects.

Free Lancing Consultant **2008-2009**

At Ericsson:

- South East regional lead for the Go to Green NPI initiative. I worked on improving AT&T CQI KPI metrics on retainability, accessibility, IRAT, ISDR, and 3G on 2G. (Hired through Networkers International MSB).

At AT&T:

- Assisted the AT&T market team in Seattle, WA in answering to the regional and national teams.
- Implemented engineering designs to double the cellular capacity of the network as a result of the iPhone 3G launch. (Hired through LCC International Inc).

MOTOROLA, Middle East (Jordan, Kuwait, Saudi Arabia) **2004-2008**
RAN Professional Services Manager 2007-2008

- Managed a team of four engineers.
- Key contributor to the 3G network planning and rollout for Zain in Saudi Arabia.
- Achieved improved data-centric KPIs through RF optimization for Zain in Kuwait.
- Handled end-to-end investigation for deteriorated circuit and packet switching user experience.
- Implemented 3G/HSPA VIP call trace analysis and recommended features and parameter changes.
- Drove the effort to improve the most vital and important coverage areas.

UTRAN Services Team Leader 2006-2007

- Led the operations for all the RNC5000 (Huawei RAN BSC6810) at Zain Kuwait with minimal 3PV support (configuration, feature introduction, and HW/SW upgrades).
- Designed and implemented Iub, Iur, and Iu interfaces (IP and ATM).
- Planned and executed O&M IP network planning and the corresponding VLAN tagging.
- Engineered QoS parameters for IP Iub and Dual Stack Iub.
- Configured and administered OMC-U running on Solaris.

Systems Engineer 2004-2005

- Structured and tested softswitching, VoIP media gateways, and HSS for roaming in Jordan (Fastlink).
- Performed UNIX administration and shell scripting.

Education

The University of Texas at Austin, Austin, Texas, USA
Ph.D. in Electrical and Computer Engineering (DICE), Machine Learning and Wireless Networks, December 2020 (expected). Supervisor: Prof. Brian L. Evans.

The University of Texas at Dallas, Richardson, Texas, USA
Professional MBA, Organizations, Strategy, and International Management, GPA: 4.000 out of 4.000. *Graduated with High Distinction.*

The University of Texas at Dallas, Richardson, Texas, USA
Master of Science in Electrical Engineering, Concentration in Communications, GPA: 4.000 out of 4.000.

The University of Jordan, Amman, Jordan
BSc. in Computer Engineering, GPA: 3.78 out of 4.00. Ranked number 1 in class.

Addendum

Soft-skills Trainings

Project Leadership, Management, and Communication • Finance for Non-Finance Managers • Presentation Skills • Negotiation Skills and Conflict Management • Project Steering • Leadership Core Curriculum for Individual Contributors • Consultation Core Curriculum • SPIN 2.0 • Toastmasters International Competent Leader and Competent Communicator • Onboarding for Sales • PMP ® *(currently preparing for the exam).*

Languages

English (Fluent), Arabic (Native), Spanish (Intermediate).

Platforms and Computer Languages

VMWare, Mac OS X (Darwin), iOS, Solaris, Microsoft Windows, C, C++, MATLAB, Python, R

Scripting Languages

PERL, Python, BASH Shell, Windows Command Shell, Javascript

Honors and Scholarships

Senior IEEE member since August 2017 • Marcus Wallenberg Foundation Scholarship for Scientific Research and Education, 2016, 2017 • UT Dallas Dean's Excellence Scholarship for Continuing Graduate Students Award, 2013-2014 • Toastmasters International Competent Communicator, November 2013 • Toastmasters International Competent Leader, July 2013 • Ericsson Key Contributor Award presented by Ericsson's former CEO Hans Vestberg, 2013 • UT Dallas SOM Dean's Excellence Scholarship Award, 2012-2013 • Motorola BRAVO! Awards for Q1 2007, Q4 2007, and Q3 2008 • The University of Jordan: Board of Trustees Award for Academic Excellence, 2004.

Patents and Peer-Reviewed Articles

[P1] F. B. **Mismar** and S. Nammi, "METHODS FOR ADAPTING A REPORTING PERIOD FOR A USER EQUIPMENT," U.S. Patent: 9,883,528, issued September 2016.

[P2] S. Nammi and F. B. **Mismar**, "A METHOD TO TRANSMIT SIGNALING RADIO BEARER MESSAGES IN MULTI ANTENNA WIRELESS SYSTEMS," U.S. Patent: US 9,762,456, issued September 2016.

[C1] F. B. **Mismar** and B. L. Evans, "Machine Learning in Downlink Coordinated Multipoint in Heterogeneous Networks," *submitted to IEEE GlobeCom 2018 Workshop,* arXiv:1608.08306, July 2018.

[C2] F. B. **Mismar** and B. L. Evans, "Deep Q-Learning for Self-Organizing Networks Fault Management and Radio Performance Improvement," *accepted to 52nd Annual Asilomar Conference on Signals, Systems, and Computers*, arXiv:1707.02329, July 2018.

[C3] F. B. **Mismar** and B. L. Evans, "Q-Learning Algorithm for VoLTE Closed-Loop Power Control in Indoor Small Cells," *accepted to 52nd Annual Asilomar Conference on Signals, Systems, and Computers,* arXiv:1710.03269, July 2018.

[C4] F. B. **Mismar** and B. L. Evans, "Partially Blind Handovers for mmWave New Radio Aided by Sub-6 GHz LTE Signaling," *IEEE International Conference on Communications (ICC)*, May 2018.

[C5] I. Da Silva, Y. Wang, F. B. **Mismar**, and W. Su, "Event-based Performance Monitoring for Inter-System Cell Reselection: A SON Enabler," *International Symposium on Wireless Communication Systems*, Paris, Aug 2012.

Volunteering Experience

- Classical Arabic linguist and editor-in-chief for K-12 curriculum (*al-Jadeed* Arabic Language Series **الجَديدُ في اللُغة العَرَبِيّة**): a series of textbooks for non-native Arabic language speakers in the USA. I am currently working on grades 1 through 5. My contributions are: content (poetry for children), proofreading, grammatical checking, and editorial changes.

- Google Translate: Level 22 Contributor in English-Arabic translation. Level 22 Contributor in Arabic-English translation. Level 2 Contributor in Spanish-Arabic translations (Google stopped this branch for contributions).

- Wikipedia: I have contributed to contents related to cellular communication, radio access protocols, and mathematics. In Classical Arabic, my contributions are mostly proofreading and editing to ensure that the content continues to preserve the endangered language.