

Faris B. Mismar, Ph.D., MBA

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Education

The University of Texas at Austin	Electrical and Computer Engineering	Ph.D.	Fall 2019
The University of Texas at Dallas	Business Administration	MBA	Summer 2014
The University of Texas at Dallas	Electrical Engineering	M.S.	Fall 2011
University of Jordan	Computer Engineering	B.Sc.	Spring 2004

Academic Positions

The University of Texas at Dallas, Adjunct Assistant Professor of Electrical and Computer Engineering, Fall 2021.

Honors and Awards

2017, Elevated to IEEE Senior Member.
 2016, Marcus Wallenberg Foundation Scholarship for Scientific Research and Education (Ph.D. full scholarship).
 2015, Ericsson recognition for my efforts in the Ericsson v Apple global patent litigation.
 2014, UT Dallas Dean's Excellence Scholarship for Continuing Graduate Students Award.
 2013, Ericsson Key Contributor Award.
 2012, UT Dallas School of Management Dean's Excellence Scholarship Award.
 2004, The University of Jordan Board of Trustees Award for Academic Excellence.

Professional Positions

Nokia, Head of Data Science and Analytics, Mobile Networks, Apr. 2020 – Present.
 Samsung Electronics America, Director Radio Performance Assurance, Apr. 2019 – Apr. 2020.
 Reliance Jio USA, Director Product and Technology Development, Feb. 2018 – Apr. 2019.
 Ericsson, Senior Manager, Radio Access and Machine Learning, Apr. 2015 – Feb. 2018.
 Ericsson, Senior Manager, Radio Access Networks, Apr. 2013 – Apr. 2015.
 Ericsson, Senior Solutions Architect, Radio Access Networks, Nov. 2011 – Apr. 2013.
 Ericsson, Experienced Radio Services Engineer, Apr. 2009 – Nov. 2011.
 AT&T, Radio Services Engineer, Oct. 2008 – Apr. 2009.
 Motorola, Radio Access Networks Professional Services Manager, Apr. 2007 – Oct. 2008.
 Motorola, Services Engineer Radio Access Networks, Dec. 2005 – Apr. 2007.
 Motorola, Services Engineer Core Networks, Dec. 2004 – Dec. 2005.
 XPress Telecommunications, Applications Engineer, Jun. 2004 – Dec. 2004.

Publications

- Details and citation information can be found at:
https://scholar.google.com/citations?user=ztRse_MAAAAJ&hl=en

Journal Articles – Appeared

- [J1] F. B. **Mismar** and J. Hoydis, “Unsupervised Learning in Next-Generation Networks: Real-Time Performance Self-Diagnosis,” in *IEEE Communications Letters*, vol. 25, no. 10, pp. 3330-3334, Oct. 2021.
- [J2] F. B. **Mismar**, A. AlAmmouri, A. Alkhateeb, B. L. Evans, and J. G. Andrews, “Deep Learning Predictive Band Switching in Wireless Networks,” in *IEEE Transactions on Wireless Communications*, vol. 20, no. 1, pp. 96-109, Jan. 2021.
- [J3] F. B. **Mismar**, B. L. Evans, and A. Alkhateeb, “Deep Reinforcement Learning for 5G Networks: Joint Beamforming, Power Control, and Interference Coordination,” in *IEEE Transactions on Communications*, vol. 68, no. 3, pp. 1581-1592, Mar. 2020.
- [J4] F. B. **Mismar**, J. Choi, and B. L. Evans, “A Framework for Automated Cellular Network Tuning with Reinforcement Learning,” in *IEEE Transactions on Communications*, vol. 67, no. 10, pp. 7152-7167, Oct. 2019.
- [J5] F. B. **Mismar** and B. L. Evans, “Deep Learning in Downlink Coordinated Multipoint in New Radio Heterogeneous Networks,” in *IEEE Wireless Communications Letters*, vol. 8, no. 4, pp. 1040-1043, Aug. 2019.

Conferences

- [C1] A. Taha, Y. Zhang, F. B. **Mismar**, and A. Alkhateeb “Deep Reinforcement Learning for Intelligent Reflecting Surfaces: Towards Standalone Operation,” Proc. *IEEE International Workshop on Signal Processing Advances in Wireless Communications*, Atlanta, GA, USA, 2020, pp. 1-5.
- [C2] F. B. **Mismar** and B. L. Evans, “Deep Q-Learning for Self-Organizing Networks Fault Management and Radio Performance Improvement,” Proc. *IEEE Asilomar*, Pacific Grove, CA, USA, 2018, pp. 1457-1461.
- [C3] F. B. **Mismar** and B. L. Evans, “Q-Learning Algorithm for VoLTE Closed-Loop Power Control in Indoor Small Cells,” Proc. *IEEE Asilomar*, Pacific Grove, CA, USA, 2018, pp. 1485-1489.
- [C4] F. B. **Mismar** and B. L. Evans, “Partially Blind Handovers for mmWave New Radio Aided by Sub-6 GHz LTE Signaling,” Proc. *IEEE Intl. Conf. on Commun. Workshops*, Kansas City, MO, USA, 2018, pp. 1-5.

Patents

- [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.

Other Major Publications

- [S1] F. B. **Mismar**, “Improving Next-Generation Wireless Network Performance and Reliability with Deep Learning,” Ph.D. Dissertation, Department of Electrical and Computer Engineering, The University of Texas at Austin, Dec. 2019.

Professional Society Services

2021, Reviewer IEEE Transactions on Wireless Communications, IEEE Communications Letters, and Globecom.
 2020, Reviewer IEEE Transactions on Vehicular Technology, IEEE Transactions on Wireless Communications, IEEE Wireless Communications Letters (**exemplary reviewer**), IEEE Transactions on Communications, IEEE Signal Processing Letters, IEEE International Conference on Communications.
 2019, Reviewer IEEE Wireless Communications Letters (**editor recognition**), IEEE Communications Letters, IEEE Transactions on Communications, IEEE Transactions on Cognitive Communications and Networking.
 2018, Reviewer IEEE Transactions on Wireless Communications, IEEE International Conference on Communications, IEEE Communications Magazine, IEEE Globecom, IEEE Vehicular Technology Society.

Invited Talks and Presentations

Oct. 14, 2021, “Machine Learning in Telecommunications: Automation and Profitability,” an invited presentation to Texas A&M University, College Station, TX, USA.
 Aug. 19, 2021, “Machine Learning in Telecommunications: Automation and Profitability,” an invited online presentation to Harvard Business School, Cambridge, MA, USA.
 Mar. 29, 2021, “Data Engineering Fluency in Radio Access Networks,” (*series of talks*), Coppell, TX, USA.
 Jul. 7, 2020, “Using Machine Learning in 5G Radio Access Networks,” (*series of talks*), Coppell, TX, USA.
 Feb. 13, 2020, “Enhanced Carrier Aggregation in Rel. 13 LTE,” Plano, TX, USA.
 Nov. 24, 2019, “Citizens Broadband Radio Services (CBRS),” Plano, TX, USA.
 May 19, 2019, “Hybrid Automatic Repeat Request (HARQ) in LTE,” Plano, TX, USA.
 Jun. 19, 2018, “Machine Learning in Wireless Communications,” Mumbai, India.
 Sep. 17, 2017, “In-building Solutions Design,” Noida, India.
 Sep. 10, 2017, “LTE Capacity and Dimensioning,” Bengaluru, India.
 Oct. 17, 2016, “Machine Learning Enables Network Intelligence,” Kista, Sweden.
 May 15, 2013, “Heterogeneous Networks Design and Planning,” Plano, TX, USA.

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