

## Table of Contents

1. Education .....	4
2. Employment.....	4
3. Honors and Awards.....	5
4. Major Areas of Research Interest .....	5
5. Research Grants .....	5
6. Publications.....	7
6.1 Edited Books or Chapters in Books .....	7
6.2 Refereed Articles in Journals.....	7
6.3 Online Publication .....	11
6.4 Refereed Conference Papers .....	11
7. National/International Presentations .....	18
8. Invited Talks .....	19
9. Teaching .....	19
9.1 Teaching History and Student Evaluations .....	19
9.1.1 Student evaluation rating .....	19
9.1.2 Dr. Naraghi-Pour's Teaching History and Student Evaluations.....	20
9.2 New Courses Developed .....	24
9.3 New Laboratories Developed .....	25
9.4 Graduate Student Supervision .....	25
9.4.1 Ph.D. Dissertations Directed .....	25
9.4.2 M.S. Theses Directed.....	25
9.4.3 MS Project supervision .....	27
9.4.4 Undergraduate Student Supervision .....	27
9.4.5 Capstone Project Supervision .....	27
9.4.6 Post-doctoral Fellow Supervision.....	27
9.4.7 Supervised Student Awards .....	28
9.4.8 Graduate Committees.....	28
9.4.9 Member of Ph.D. Committees as Dean's Representative .....	29
10. Service .....	29
10.1 University Service.....	29

10.2	Professional Service .....	30
10.2.1	Editorship .....	30
10.2.2	Professional Memberships.....	30
10.2.3	Conference Technical Program Committee .....	30
10.2.4	Conference Session Chair.....	32

**Curriculum Vitae – Mort Naraghi-Pour**

Division of Electrical & Computer Engineering

School of Electrical Engineering & Computer Science

Louisiana State University

Baton Rouge, LA 70803

Phone: (225) 578-5551

Fax: (225) 578-5200

Email: [naraghi@lsu.edu](mailto:naraghi@lsu.edu)

Web: <https://www.ece.lsu.edu/naraghi/index.html>

## **Mort Naraghi-Pour, Ph.D.**

Michel B. Voorhies Distinguished Professor  
Division of Electrical and Computer Engineering  
School of Electrical Engineering and Computer Science  
Louisiana State University  
Baton Rouge, LA 70803  
Office Ph: (225) 578-5551  
FAX: (225) 578-5200  
E-mail: naraghi@lsu.edu

### **1. Education**

Doctor of Philosophy:	CICE, The University of Michigan, May 2, 1987.
Dissertation:	"Predictive Quantization of Autoregressive and Composite Random Processes."
Advisor:	Professor David L. Neuhoff.
M.S. in Engineering:	CICE, The University of Michigan, December 22, 1982.
Overall GPA:	8.454/9.
EDE Diploma:	Philips International Institute for Technological Studies, Eindhoven, The Netherlands, December 4, 1978.
Bachelor of Science:	University of Tehran, Iran, December 20, 1977.

### **2. Employment**

1. Professor in the Division of Electrical and Computer Engineering, Louisiana State University, 2014-present.
2. Tenured Associate Professor in the Department of Electrical and Computer Engineering, Louisiana State University, August 1993 - 2014.
3. Assistant Professor in the Department of Electrical and Computer Engineering, Louisiana State University, August 1987 - August 1993.
4. Senior Member of Technical Staff, Celox networks, Inc., St. Louis, MO, June 2000 - Jan. 2002.
5. Lecturer in the Department of Electrical Engineering and Computer Science, The University of Michigan, January-June 1987.
6. Teaching Assistant in the Department of Electrical Engineering and Computer Science, The University of Michigan, 1981-1986.
7. Philips Research Laboratories, Telecommunications Research Group, Eindhoven, The Netherlands, June-December 1978.
8. Iran Telecommunications Research Center, 1977.

### 3. Honors and Awards

1. Michel B. Voorhies Distinguished Professor of Electrical Engineering, Dec. 2013 – Present.
2. Life Senior Member, Institute of Electrical and Electronics Engineers.
3. Best paper award for the paper entitled “Resource Allocation for OFDM Systems in the Presence of Time-varying Channels,” **M. Naraghi-Pour** and X. Gao, International Conference on Wireless Information networks and Systems (WINSYS 2007), Barcelona, Spain, July 28-31, 2007.
4. Awarded the Rackham Pre-doctoral Fellowship in Electrical and Computer Engineering, by the Rackham Graduate School of the University of Michigan, 1982.
5. Awarded the Philips International Institute Scholarship for a One-Year Post Graduate Study in the Netherlands, January-December 1978.

### 4. Major Areas of Research Interest

Wireless communication, signal and image processing, statistical signal processing, machine learning, communication and information theory.

### 5. Research Grants

1. **M. Naraghi-Pour (PI)**, “Machine Learning Models for Growth and Optimization of 2-D materials,” Clarkson Aerospace Inc./AFOSR, \$199,910, March 15, 2024-Feb. 28, 2025.
2. **M. Naraghi-Pour (PI)**, “Cyber-Spectrum Research & Technology Development Virtual Environment,” Clarkson Aerospace Inc./AFRL, \$95,000, Jan 1, 2018-Jan 19, 2019.
3. **M. Naraghi-Pour (PI)**, “Cyber-Spectrum Research & Technology Development Virtual Environment,” Clarkson Aerospace Inc./AFRL Rome, NY, \$192,126, Oct.1, 2015-Sept. 27, 2016.
4. **M. Naraghi-Pour (PI)**, M. Feldman, G. Gu, “*Secure, Reliable and Distributed Multilayer Sensor Networks; Cooperative Localization using Wideband Signals of Opportunity in Multipath Environments; Testbed Implementation for Secure Communication between Android OS Devices; A Continuously Variable Phased Array for Laser Beam Steering (LBS), Research Collaboration Program*, Clarkson Aerospace/ AFRL, \$1,080,325, 09/03/2013-5/18/2018.
5. **M. Naraghi-Pour (PI)**, M. Feldman, T. Daniels-Race, “*Fabrication of Nano-Devices with Minimal Lithography*,” Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$150,010, 1/1/2013-11/30/2013.
6. **M. Naraghi-Pour (PI)**, G. Gu, S. Park, “*Defensive Techniques for Distributed Sensing Systems, Performance Optimization of Distributed Hadoop-based Cloud Computing Data Centers Integrated with Android Smartphone Clouds*,” Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$200,008, 1/1/2013-11/30/2013.
7. **M. Naraghi-Pour (PI)**, “Change Detection and Statistical Analysis of IR Images,” Pennington Biomedical Research Center, \$27,648, 2012-2013.

8. **M. Naraghi-Pour (PI)**, M. Feldman, "*Interrupted in time and frequency ultra-wideband SAR, Localization in GPS-denied environments, Beam forming and manipulation of active electro-optical systems*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$150,026, 11/1/2011-10/31/2012.
9. **M. Naraghi-Pour (PI)**, G. Gu, M. Feldman, "*Interrupted in time and frequency ultra-wideband SAR, localization in GPS-denied environment, spatial-spectral change detection, beam forming and manipulation of active electro-optical systems*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$190,000, 10/1/2010-10/30/2011.
10. **M. Naraghi-Pour (PI)**, J. Aravena, G. Gu, M. Feldman, "*Compression of SAR Video Phase history, Automated Perimeter Security, Change Detection in Hyperspectral Images, Aperture Development and Beam Steering*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$400,007, 11/1/2009-10/31/2010.
11. **M. Naraghi-Pour (PI)**, J. Aravena, G. Gu, M. Feldman, "*Compression of SAR Video Phase history, Change Detection in Hyperspectral Images, Aperture Development and Beam Steering*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$280,213, Sept. 2008-Nov. 2009.
12. **M. Naraghi-Pour (PI)**, J. Aravena, R. Ramanujam, N. Brenner, S. Iyengar, "*Automated Perimeter Security*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$65,000, Feb. 2007-Feb 2008.
13. **M. Naraghi-Pour (PI)**, J. Aravena, G. Gu, M. Feldman, K. Zhou, T. Daniels-Race, M. Feldman, R. Kannan, B. Audiffred, "*Adaptive Transceiver Systems, Emitter Identification Techniques, Data Compression of Geolocation Signals, Advanced Direction Finding with Wideband Signals in Multipath Fading Environments, Aperture Development*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$1,090,000, Sept. 8, 2006-Feb 28 2009.
14. **M. Naraghi-Pour (PI)**, J. Aravena, G. Gu, and K. Zhou, "*Interference avoiding systems and cognitive radios, advanced geolocation and direction finding and data compression for geolocation signals in sensor networks*," Minority Leaders program, Clarkson Aerospace Inc./AFRL, \$490,000, 6/1/2005-9/30/2006.
15. **M. Naraghi-Pour (PI)**, "*Adaptive Modulation and Dynamic Power Allocation for Wireless OFDM Systems*," Faculty Research Grant (FRG) Program, LSU, \$10,000, 2005-2006.
16. **M. Naraghi-Pour (PI)**, "*Multiple Access Control in Mobile Ad-Hoc Networks*," National Institute of Standards and Technology, \$25,000, May 30-Aug. 10, 2000.
17. **M. Naraghi-Pour (PI)**, "*Quality of Service Provisioning in Wireless ATM Networks*," National Institute of Standards and Technology, \$25,000, May 30-Aug. 10, 1999.
18. M. Hegde (PI), **M. Naraghi-Pour (Co-PI)**, "*Investigation of Capacity, Microwave co-existence and Security in Wireless Networks*," Meretel Corporation, \$60,823, Aug. 14, 1995-Aug. 13, 1996.
19. A. El-Amawy (PI), M. Hegde, **M. Naraghi-Pour (Co-PI)**, "*Fault Tolerant Neural Networks: Design Theories and Applications*," NSF/EPSCoR, \$368,876, April 1, 1992-March 31, 1996.
20. **M. Naraghi-Pour (PI)**, "*Neural Networks for Signal Processing*," LSU Council on Research, Summer Faculty Research Grant, \$4000, 1991.
21. **M. Naraghi-Pour (PI)**, M. Hegde, J. Aravena, A. Skavantzios and S.Q. Zheng, "*New Perspectives in Neural Computing*," NSF/LaSER, Louisiana Board of Regents, \$78,849, June 1, 1991-June 31, 1992.

M. Hegde (PI), **M. Naraghi-Pour (Co-PI)**, “Connectivity-Constrained Neural Networks,” Louisiana Education Quality Support Fund, Louisiana Board of Regents, \$70,000, June 1, 1989-June 31, 1991.

## 6. Publications

### 6.1 Edited Books or Chapters in Books

1. C. Vargas-Rosales, R. Villalpando-Hernandez and **Mort Naraghi-Pour**, “Advances in Radio Localization Techniques,” Cooperative Localization and Navigation, Theory, Research and Practice, C. Gao, G. Zhao and H. Fourati (Eds), CRC Press, 2020.
2. X. Gao and **M. Naraghi-Pour**, “Bit and Power Allocation Strategies for OFDM Systems over Time-Varying Channels,” *Communications in Computer and Information Science*, Vol. 23, pp. 356-370, Springer, E-business and Telecommunications, Filipe, Joaquim Obaidat, Mohammad S. (Eds), 2008.
3. M. Hegde, **M. Naraghi-Pour**, J. Bordes, C. Davis, O. Schmid and M. Maher, “An Architecture for a Scalable Broadband IP Services Switch,” pp. 124-136, *Springer Verlag, Lecture Notes in Computer Science Series*, P. Lorenz (Ed.) June 2001.
4. **M. Naraghi-Pour**, “Proceedings of the Twenty-Eighth Southeastern Symposium on System Theory,” editor, *IEEE Computer Society Press*, Los Alamitos, CA, 1996.
5. **M. Naraghi-Pour** and D. Neuhoff, “On the Convergence of the Projection Method for an Autoregressive Source and a Matched DPCM Code,” W.A. Porter and S.C. Kak, Eds., Springer Verlag, Vol. 129, pp. 133-1414, 1989.

### 6.2 Refereed Articles in Journals

1. M. Rashid and **M. Naraghi-Pour**, “Clustered Sparse Channel Estimation for Massive MIMO Systems by Expectation Maximization-Propagation (EM-EP),” *IEEE Transactions on Vehicular Technology*, vol. 72, no. 7, pp. 9145-9159, July 2023, doi: 10.1109/TVT.2023.3250399
2. **M. Naraghi-Pour**, M. Rashid and C. Vargas-Rosales, "Semi-Blind Channel Estimation and Data Detection for Multi-Cell Massive MIMO Systems on Time-Varying Channels," *IEEE Access*, vol. 9, pp. 161709-161722, Dec. 2021, doi: 10.1109/ACCESS.2021.3132263.
3. S. Sobhiyeh and **M. Naraghi-Pour**, "Online Detection and Parameter Estimation with Correlated Observations," *IEEE Systems Journal*, Vol. 15, Issue 1, pp. 180-191, March 2021.
4. H. Sun, **M. Naraghi-Pour**, W. Sheng and Y. Han, “Performance Analysis of Incremental Relaying in Multi-hop Relay Networks,” *IEEE Access*, Vol. 8, pp. 68747-68761, April 2020.
5. H. Sun, **M. Naraghi-Pour**, W. Sheng and R. Zhang, "A Hop-by-Hop Relay Selection Strategy in Multi-Hop Cognitive Relay Networks," *IEEE Access*, vol. 8, pp. 21117-21126, Feb. 2020.

6. M. Rashid and **M. Naraghi-Pour**, "Multitarget Joint Delay and Doppler-Shift Estimation in Bistatic Passive Radar," *IEEE Transactions on Aerospace and Electronic Systems (TAES)*, Vol. 56, No. 3, pp. 1795-1806, June 2020.
7. **M. Naraghi-Pour** and T. Ikuma, "EM-Based Localization of Noncooperative Multicarrier Communication Sources with Noncoherent Subarrays," *IEEE Transactions on Wireless Communications*, Vol. 17, Issue 9, pp. 6149-6159, Sept. 2018.
8. Ghavami, K. and **M. Naraghi-Pour**, "Blind Channel Estimation and Symbol Detection for Multi-Cell Massive MIMO Systems by Expectation Propagation," *IEEE Transactions on Wireless Communications*, Vol. 17, Issue 2, pp. 943-954, Feb. 2018.
9. Ghavami, K. and **M. Naraghi-Pour**, "MIMO Detection with Imperfect Channel State Information Using Expectation Propagation," *IEEE Transactions on Vehicular Technology*, Vol. 66, Issue 9, pp. 8129-8138, Sept. 2017.
10. Sun, H. and **M. Naraghi-Pour**, "A Hop-By-Hop Relay Selection Strategy for Multi-hop Relay Networks with Imperfect Channel State Information," *IET Communications*, Vol. 11, Issue 9, pp. 1387-1395, 2017.
11. Peterson, C., Orooji, M., Johnson, D., **Naraghi-Pour, M.** and Ravussin, E., "Brown Adipose Tissue Does Not Seem to Mediate Metabolic Adaptation to Overfeeding in Men," *Obesity*, Vol. 25, Issue 3, pp. 502-505, March 2017.
12. Sobhiyeh, S. and **M. Naraghi-Pour**, "Hypothesis Testing with Dependent Observations," *IEEE Transactions on Signal Processing*, Vol. 65, No. 5, pp. 1183 – 1195, March 1, 2017.
13. Soltanmohammadi, E., K. Ghavami and **M. Naraghi-Pour**, "A Survey of Traffic Issues in Machine-to-Machine Communications over LTE," *IEEE Internet of Things Journal*, Vol. 3, Issue 6, pp. 865-884, Dec. 2016.
14. Soltanmohammadi, E., **M. Naraghi-Pour** and M. van der Schaar, "Context-based unsupervised ensemble learning and feature ranking," *Machine Learning*, Vol. 105, No. 3, pp. 459-485, Dec. 2016.
15. Orooji, M., E. Soltanmohammadi and **M. Naraghi-Pour**, "Improving Detection Delay in Cognitive Radios Using Secondary User Receiver Statistics," *IEEE Transactions on Vehicular Technology*, Vol. 64, No. 9, pp. 4041-4055, Sept. 2015.
16. **Naraghi-Pour, M.**, R. Cortez and T. Ikuma, "Analysis-by-Synthesis Compression of Range-Focused SAR Raw Data," *IEEE Transactions on Aerospace and Electronic Systems*, Vol. 51, No. 2, pp. 1298-1309, April 2015.
17. **Naraghi-Pour M.** and E. Soltanmohammadi, "Tenor: A Measure of Central Tendency for Distributed Networks," *IEEE Signal Processing Letters*, Vol. 22, No. 1, pp. 58-61, Jan. 2015.
18. **Naraghi-Pour, M.**, and Gustavo Chacon Rojas, "A Novel Algorithm for Distributed Localization in Wireless Sensor Networks," *ACM Transactions on Sensor Networks*, Vol. 11, Issue 1, pp.1:1-1:25, Nov. 2014.



19. Soosahabi, R., **M. Naraghi-Pour**, D. Perkins and M.A. Bayoumi, "Optimal Probabilistic Encryption for Secure Detection in Wireless Sensor Networks," *IEEE Transactions on Information Forensics and Security*, Vol. 9, No. 3, pp. 375-385, March 2014.
20. Soltanmohammadi, E. and **M. Naraghi-Pour**, "Nonparametric Density Estimation, Hypotheses Testing, and Sensor Classification in Centralized Detection," *IEEE Transactions on Information Forensics and Security*, Vol. 9, No. 3, pp. 426-435, March 2014.
21. Soltanmohammadi, E. and **M. Naraghi-Pour**, "Fast Detection of Malicious Behavior in Cooperative Spectrum Sensing," *IEEE Journal on Selected Areas in Communications*, Vol. 32, No. 3, pp. 377-386, March 2014.
22. Soltanmohammadi, E. and **M. Naraghi-Pour**, "Semi-Blind Data Detection for Unitary Space-Time Modulation in MIMO Communications Systems," *IEEE Transactions on Communication*, Vol. 61, Issue 12, pp. 5006-5015, Dec. 2013.
23. Soltanmohammadi, E. and **M. Naraghi-Pour**, "Blind Modulation Classification over Fading Channels Using Expectation-Maximization", *IEEE Communications Letters*, Vol. 17, No. 9, pp. 1692-1695, Sept. 2013.
24. Soltanmohammadi, E. M. Orooji, **M. Naraghi-Pour**, "Spectrum Sensing Over MIMO Channels Using Generalized Likelihood Ratio Tests," *IEEE Signal Processing Letters*, Vol.20, No. 5, pp. 439,442, May 2013.
25. Soltanmohammadi, E., M. Orooji and **M. Naraghi-Pour**, "Improving the Sensing-Throughput Tradeoff for Cognitive Radios in Rayleigh Fading Channels," *IEEE Transactions on Vehicular Technology*, Vol. 62, No. 5, pp. 2118-2130, June 2013.
26. E. Soltanmohammadi, M. Orooji and **M. Naraghi-Pour**, "Decentralized Hypothesis Testing in Wireless Sensor Networks in the Presence of Misbehaving Nodes," *IEEE Transactions on Information Forensics and Security*, Vol. 8, No. 1, pp. 205-215, Jan. 2013.
27. Soosahabi, R. and **M. Naraghi-Pour**, "Scalable PHY-Layer Security for Distributed Detection in Wireless Sensor Networks," *IEEE Transactions on Information Forensics and Security*, Vol. 7, No. 4, pp. 1118-1126, Aug. 2012.
28. Ikuma, T., **M. Naraghi-Pour** and T. Lewis, "Predictive Quantization of Range-Focused SAR Raw Data," *IEEE Transactions on Geoscience and Remote Sensing*, Vol. 50, No. 4, pp. 1340-1348, April 2012.
29. M. Orooji, R. Soosahabi and **M. Naraghi-Pour**, "Blind Spectrum Sensing Using Antenna Arrays and Path Correlation," *IEEE Transactions on Vehicular Technology*, Vol. 60, No. 8, pp. 3758-3767, Oct. 2011.
30. **M. Naraghi-Pour** and T. Ikuma, "Autocorrelation-Based Spectrum Sensing for Cognitive Radios," *IEEE Transactions on Vehicular Technology*, Vol. 59, No. 2, pp. 718-733, Feb. 2010.
31. **M. Naraghi-Pour** and V. Desai, "Loop-free Traffic Engineering with Path Protection in MPLS VPNs," *Computer Networks*, Vol. 52, No. 12, pp. 2360-2372, Aug. 2008.

32. **M. Naraghi-Pour** and C.Y. Wei, "Loop-Free Path Restoration with QoS and Label Constraints in MPLS Networks," *Journal of High Speed Networks* (16) 2007, pp. 175-191.
33. G. Gu, X. Gao, J. He and **M. Naraghi-Pour**, "Parametric modeling of Wideband and Ultra-Wideband Channels in Frequency Domain," *IEEE Transactions on Vehicular Technology*, Vol. 56, No. 4, pp. 1600-1612, July 2007.
34. R. Akl, M. Hegde and **M. Naraghi-Pour**, "Mobility-based CAC Algorithm for Arbitrary Call Arrival Rates in CDMA Cellular Systems," *IEEE Transactions on Vehicular Technology*, Vol. 54, No. 2, pp. 639-651, March 2005.
35. C. Vargas, M. Hegde and **M. Naraghi-Pour**, "Implied Costs for Multirate Wireless Networks," *Journal of Wireless Networks*, Vol. 10, issue 3, pp. 323-337, May 2004.
36. R. Akl, M. Hegde, **M. Naraghi-Pour** and P. Min, "Multi-Cell CDMA Network Design," *IEEE Trans. on Vehicular Technology*, Vol. 50, No. 3, pp. 711-722, May 2001.
37. C. Vargas, M. Hegde, **M. Naraghi-Pour** and P. Min, "Shadow Prices for LLR and ALBA," *IEEE/ACM Trans. on Networking*, Vol. 4, No. 5, pp. 796-807, Oct. 1996.
38. M. Hegde, **M. Naraghi-Pour** and G. Nandakumar, "Flexible Learning Rules for Neural Networks," *Neural, Parallel & Scientific Computations*, vol. 2, no. 4, pp. 467-490, Dec. 1994.
39. M. Hegde, **M. Naraghi-Pour** and X. Chen, "Convolutional Coding for Finite-State Channels," *IEEE Trans. on Communications*, vol. 42, no. 6, pp. 2231-2238, June 1994.
40. M. Hegde, **M. Naraghi-Pour** and G. Nandakumar, "On the Capacity of Constrained Connectivity Hopfield Neural Networks," *Neural, Parallel & Scientific Computations*, vol. 2, no. 1, pp. 115-129, March 1994.
41. S. Latifa, M. Hegde and **M. Naraghi-Pour**, "Conditional Connectivity Measures for Large Multiprocessor Systems," *IEEE Trans. on Computers*, vol. 43, no. 12, pp. 218-222, Feb. 1994.
42. **M. Naraghi-Pour**, M. Hegde and N. Arora, "DPCM Encoding of Regenerative Composite Processes," *IEEE Trans. on Information Theory*, vol. 40, no. 1, pp. 153-160, Jan. 1994.
43. A. El-Amawy, **M. Naraghi-Pour** and M. Hedge, "Noise Modeling Effects in Redundant Synchronizers," *IEEE Trans. on Computers*, Vol. 42, No. 12, pp. 1487-1494, Dec. 1993.
44. **M. Naraghi-Pour**, "Trellis Codes for 4-ary Continuous Phase Frequency Shift Keying," *IEEE Trans. on Communications*, Vol. 41, No. 11, pp. 1582-1587, Nov. 1993.
45. "Convergence of the Projection Method for an Autoregressive Source and a Matched DPCM Code," **M. Naraghi-Pour** and D. Neuhoff, *IEEE Transactions on Information Theory*, Vol. 36, No. 6, pp. 1255-1264, Nov. 1990.
46. **M. Naraghi-Pour** and D. Neuhoff, "On the Continuity of the Stationary State Distribution of DPCM," *IEEE Transactions on Information Theory*, Vol. 36, No. 2, pp. 305-311, March 1990.
47. **M. Naraghi-Pour** and D. Neuhoff, "Mismatched DPCM Encoding of Autoregressive Processes," *IEEE Transactions on Information Theory*, Vol. 36, No. 2, pp. 296-304, March 1990.

48. **M. Naraghi-Pour**, "The Design and Hardware Considerations of a Single Channel PCM Decoder via Sigma Delta Modulation," Technical Note No. 250 of Philips Research Laboratories, Eindhoven, the Netherlands, 1978.

### 6.3 Online Publication

M. Hegde and **M. Naraghi-Pour**, "Engineering traffic in MPLS networks," Nov. 2001, EETimes, <http://eetimes.com/design/communications-design/4141162/Engineering-traffic-in-MPLS-networks>

### 6.4 Refereed Conference Papers

1. M. Rashid and M. Naraghi-Pour, "Block-Sparse Channel Estimation in Massive MIMO Systems by Expectation Propagation," 2021 IEEE Global Communications Conference (GLOBECOM), 2021, pp. 1-6, doi: 10.1109/GLOBECOM46510.2021.9685633.
2. **M. Naraghi-Pour**, M. Rashid and C. Vargas-Rosales, "Semi-blind Channel Estimation and Data Detection for Time-Varying Massive MIMO System," *Proceedings of the International Conference on Communication (ICC 2021)*, pp. 1-6, Virtual Conference, June 14-23, 2021.
3. M. Rashid and **M. Naraghi-Pour**, "Multi-Target Delay and Doppler Estimation in Bistatic Passive Radar Systems," *Proceedings of the IEEE Radar Conference (RadarConf'2021)*, pp. 1-6, Virtual Conference, May 10-14, 2021.
4. H. Sun, **M. Naraghi-Pour**, W. Sheng and Y. Han, "Outage Analysis of Hop-by-Hop Relay Selection in Multi-Hop Cognitive Relay Networks," *Proceedings of the International Conference on Communication (ICC 2020)*, pp. 1-6, Virtual Conference, June 7-11, 2020.
5. S. Sobhiyeh and **M. Naraghi-Pour**, "Online Hypothesis Testing and Non-Parametric Model Estimation Based on Correlated Observations," *Proceedings of 2018 IEEE Global Communications Conference (GLOBECOM)*, Abu Dhabi, United Arab Emirates, 2018, pp. 1-6.
6. **M. Naraghi-Pour** and T. Ikuma, "Joint Spatial and Spectral Localization of OFDM Sources with Noncoherent Arrays," *Proceedings of 2018 IEEE Global Communications Conference (GLOBECOM)*, Abu Dhabi, United Arab Emirates, 2018, pp. 1-5.
7. **M. Naraghi-Pour** and T. Ikuma, "Localization of non-cooperative OFDM sources with noncoherent snapshots," *Proceedings of IEEE Wireless Communications and Networking Conference (WCNC)*, pp. 1-6, April 2018.
8. S. Sobhiyeh and **M. Naraghi-Pour**, "Online detection and parameter estimation with correlated data in wireless sensor networks," *Proceedings of IEEE Wireless Communications and Networking Conference (WCNC)*, pp. 1-6, April 2018.
9. Ghavami, K. and **M. Naraghi-Pour**, "Noncoherent Massive MIMO Detection by Expectation Propagation," *Proceedings of IEEE Global Communication Conference (Globecom 2017)*, pp. 1-6, Singapore, Dec. 4-8, 2017.

10. Ghavami, K. and **M. Naraghi-Pour**, "Noncoherent SIMO Detection by Expectation Propagation," *Proceedings of International Conference on Communication (ICC 2017)*, pp. 1-6, Paris, France, May 21-25, 2017.
11. Sobhiyeh, S. and **M. Naraghi-Pour**, "Estimation and Detection Based on Correlated Observation from a Heterogeneous Sensor Network," *Proceedings of International Conference on Communication (ICC 2017)*, pp. 1-6, Paris, France, May 21-25, 2017.
12. Soosahabi, R., **Naraghi-Pour, M.**, Nasirian, N. and Bayoumi, M. "Correlation-based detection of TCM signals for Cognitive Radios," *Proceedings of the 42nd International Conference on Acoustics, Speech, and Signal Processing (ICASSP2017)*, pp. 1-4, New Orleans, March 5-9, 2017.
13. H. Sun and **M. Naraghi-Pour**, "Performance Analysis of a Hop-by-Hop Relay Selection Strategy in Multi-Hop Networks," *Proceedings of the 25th International Conference on Computer Communication and Networks (ICCCN-2016)*, pp. 1-7, Waikoloa, Hawaii, USA, Aug. 1-4, 2016.
14. E. Soltanmohammadi, **M. Naraghi-Pour** and M. van der Shaar, "Context-based Unsupervised Data Fusion for Decision Making," *Proceedings of the 32nd International Conference on Machine Learning (ICML-15)*, pp. 2076-2084, Lille, France, July 06-11, 2015.
15. Ghavami and **M. Naraghi-Pour**, "A Low Complexity Cryptosystem Based on Nonsystematic Turbo Codes," *Proceedings of International Conference on Communication (ICC 2015)*, Communication and Information Security Systems Security, pp. 7388-7393, London, UK, June 2015.
16. E. Soltanmohammadi and **M. Naraghi-Pour**, "Density Estimation, Hypotheses Testing, and Sensor Classification in Wireless Sensor Networks," *Proceedings of the Military Communication Conference*, pages 1-6, Oct. 2014, Baltimore, MD.
17. H. Sun and **M. Naraghi-Pour**, "Decode-and-Forward Relay Selection with Imperfect CSI in Cognitive Relay Networks," *Proceedings of the Military Communication Conference*, pages 1-6, Oct. 2014, Baltimore, MD.
18. **M. Naraghi-Pour**, Gustavo Chacon Rojas, "Sensor Network Localization via Distributed Randomized Gradient Descent," *Proceedings of the Military Communication Conference*, pages 1-6, Nov. 2013, San Diego, CA.
19. E. Soltanmohammadi, **Mort Naraghi-Pour**, "Detection of Misbehavior in Cooperative Spectrum Sensing," *Proceedings of the Military Communication Conference*, pages 1-6, Nov. 2013, San Diego, CA.
20. E. Soltanmohammadi, **Mort Naraghi-Pour**, "Joint Channel and Symbol Timing Estimation and Data Detection," *Proceedings of the Military Communication Conference*, pages 1-6, Nov. 2013, San Diego, CA.
21. M. Orooji, E. Soltanmohammadi, **Mort Naraghi-Pour**, "Evaluating the Effects of Co-Channel Interference in Wireless Networks," *Proceedings of the 38th International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, Vancouver, Canada, May 26-31, 2013.

22. R. Soosahabi, N. Nasirian, **M. Naraghi-Pour** and M. Bayoumi, "A Fast New Method to Mitigate Amplifier-Induced ICI in OFDM systems Based on Predistortion in DFT Domain," *Proceedings of the 5th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO'13)*, pp. 1-5, April-28-30, 2013.
24. R. Soosahabi, **M. Naraghi-Pour**, "Scalable PHY-Layer Security for Distributed Detection in Wireless Sensor Networks," *Proceedings of IEEE Vehicular Technology Conference (VTC Fall)*, pp. 1-5, Sept. 2012.
25. E. Soltanmohammadi, M. Orooji and **M. Naraghi-Pour**, "Spectrum monitoring for cognitive radios in Rayleigh fading channel," *Proceedings of IEEE Military Communication Conference (MILCOM 2012)*, pp. 1-6, Oct-Nov. 2012.
26. E. Soltanmohammadi, M. Orooji and **M. Naraghi-Pour**, "Distributed detection in wireless sensor networks in the presence of misbehaving nodes," *Proceedings of IEEE Military Communication Conference (MILCOM 2012)*, pp. 1-6, Oct-Nov. 2012.
27. M. Orooji, E. Soltanmohammadi and **M. Naraghi-Pour**, "Performance analysis of spectrum monitoring for cognitive radios," *Proceedings of IEEE Military Communication Conference (MILCOM 2012)*, pp. 1-6, Oct-Nov. 2012.
28. R. Soosahabi, M. Orooji and **M. Naraghi-Pour**, "Multi-Antenna Blind Spectrum Sensing for Cognitive Radios Using Path Correlations," *Proceedings of IEEE Global Telecommunications Conference (GLOBECOM 2011)*, pp. 1-5, 5-9 Dec. 2011.
29. M. Naraghi-Pour and Venkata Sriram Siddhardh Nadendla, "Secure Detection in Wireless Sensor Networks Using a Simple Encryption Method," *Proceedings of IEEE Wireless Communication and Networking Conference (WCNC 2011)*, pp. 896-901, March 28-31, Cancun, Mexico.
30. **M. Naraghi-Pour**, R. Cortez, T. Ikuma, and T. Lewis, "CELP-like compression of spotlight-mode SAR raw data in transform domain," *Proceedings of IEEE Military Communication Conference (MILCOM 2010)*, pp. 870-874, San Jose, CA, Oct 2010.
31. T. Ikuma, **M. Naraghi-Pour** and T. Lewis, "Predictive Quantization of Dechirped Spotlight-Mode SAR Raw Data in Transform Domain," *Proceedings of 2010 IEEE International Geoscience and Remote Sensing Symposium*, July 25-30, pp. 3789-3792, Honolulu, Hawaii.
32. T. Ikuma, **M. Naraghi-Pour** and T. Lewis, "Autoregressive Modeling of Dechirped Spotlight-Mode SAR Raw Data in Transform Domain," *Proceedings of 2010 IEEE International Geoscience and Remote Sensing Symposium*, July 25-30, pp. 4640-4643, Honolulu, Hawaii.
33. **M. Naraghi-Pour** and T. Ikuma, "A Comparison of Three Classes of Spectrum Sensing Techniques," *Proceedings of IEEE Global Telecommunications Conference, (GLOBECOM 2008)*, pp. 1-5, Nov. 30-Dec 4, 2008.
34. T. Ikuma and **M. Naraghi-Pour**, "Diversity Techniques for Spectrum Sensing in Fading Environments," *Proceedings of Military Communication Conference, (MILCOM 08)*, pp. 1-7, Nov. 17-19, 2008.

35. T. Ikuma and **M. Naraghi-Pour**, "Autocorrelation-Based Spectrum Sensing Algorithms for Cognitive Radios," *Proceedings of 17th International Conference on Computer Communications and Networks*, (ICCCN 08), pp. 1-6, Aug. 3-7, 2008.
36. **M. Naraghi-Pour** and N. Tayem, "Propagator Method and Triangular Factorization for Source Bearing Estimation of Coherent sources," **M. Naraghi-Pour** and N. Tayem, *Proceedings of the Military Communications Conference*, (MILCOM 2007), Oct. 29-31, 2007 Orlando FL.
37. N. Tayem and **M. Naraghi-Pour**, "Unitary Root MUSIC and Unitary MUSIC with Real-Valued Rank Revealing Triangular Factorization," *Proceedings of the Military Communications Conference*, (MILCOM 2007), Oct. 29-31, 2007, Orlando FL.
38. N. Tayem and **M. Naraghi-Pour**, "A Unitary MUSIC-Like Algorithm for Coherent Sources" *Proceedings of the Vehicular Technology Conference*, (VTC-2007 fall), Sept. 30-03 Oct., 2007, Baltimore, MD.
39. K. Gunturu and **M. Naraghi-Pour**, "Optimal Energy Allocation for Detection in Wireless Sensor Networks," *Proceedings of the International Conference on Wireless Information Networks and Systems*, (WINSYS 2007), pp. 17-21, Barcelona, Spain, July 28-31, 2007.
40. **M. Naraghi-Pour** and X. Gao, "Resource Allocation for OFDM Systems in the Presence of Time-varying Channels," *Proceedings of the International Conference on Wireless Information Networks and Systems*, (WINSYS 2007), pp. 117-124, Barcelona, Spain, July 28-31, 2007.
41. N. Tayem and **M. Naraghi-Pour**, "A Fast Algorithm for Direction of Arrival Estimation in Multi-Path Environments," *Proceedings of SPIE – Volume 6577, Wireless Sensing and Processing II*, Raghuveer M. Rao, Sohail A. Dianat, Michael D. Zoltowski, Editors, 65770B (Apr. 25, 2007).
42. J. DeClouet and **M. Naraghi-Pour**, "Robust Modulation Classification Techniques Using Cumulants and Hierarchical Neural Networks," *Proceedings of SPIE – Volume 6567, Signal Processing, Sensor Fusion, and Target Recognition XVI*, Ivan Kadar, Editor, 65671J (May. 7, 2007).
43. Y.B. Reddy and **M. Naraghi-Pour**, "Genetic algorithm approach for adaptive power and subcarrier allocation in multi-user OFDM systems," *Proceedings of SPIE – Volume 6560, Intelligent Computing: Theory and Applications V*, Kevin L. Priddy, Emre Ertin, Editors, 65600K (Apr. 30, 2007).
44. Gao, X. and **M. Naraghi-Pour**, "Computationally Efficient Resource Allocation for Multiuser OFDM Systems," *Proceedings of the IEEE Wireless Communication and Networking Conference*, (WCNC2006), April 3-6, 2006, Las Vegas, NV.
45. **M. Naraghi-Pour** and Y. Chai, "Call Admission Control for CDMA Cellular Networks Supporting Multimedia Services," *Proceedings of the IEEE Wireless Communication and Networking Conference*, (WCNC2006), April 3-6, 2006, Las Vegas, NV.

46. B. Akl, **M. Naraghi-Pour** and M. Hegde, "Throughput Optimization in Multi-Cell CDMA Networks," *Proceedings of the IEEE Wireless Communication and Networking Conference*, (WCNC2005), Vol. 3, pp. 1292 - 1297, March 13-17, 2005, New Orleans, LA.
47. X. Gao and **M. Naraghi-Pour**, "Maximum likelihood Receiver for Multiband Keying Signals in AWGN Channel," *Proceedings of the IEEE Global Telecommunications Conference, 2004 (GLOBECOM '04)*, Vol. 6, pp. 3522-3525, 29 Nov.-3 Dec., 2004, Dallas, TX.
48. G. Gu; J. He, X. Gao and **M. Naraghi-Pour**, "An Analytic Approach to Modeling and Estimation of OFDM Channels," *Proceedings of the IEEE Global Telecommunications Conference, 2004 (GLOBECOM '04)*, Vol. 6, pp. 2381 - 2386, 29 Nov.-3 Dec., 2004, Dallas, TX.
49. C-Y Wei and **M. Naraghi-Pour**, "Path Restoration with QoS and Label Constraints in MPLS Networks," *Proceedings of the International Conference on Communications (ICC04)*, Vol. 2, pp. 1278-1282, June 2004, Paris, France.
50. M. Hegde and **M. Naraghi-Pour**, "Scaling High-Speed Shared-Memory Switch Fabric Buffers," *Proceedings of the IEEE Workshop on High Performance Switching and Routing*, pp. 281-286, Dallas, TX, May 29-31, 2001.
51. **M. Naraghi-Pour**, "Bandwidth and Buffer Dimensioning for Guaranteed Quality of Service in Wireless ATM Networks," *Proceedings of the Wireless Communication and Networking Conference (WCNC'00)*, Chicago, IL, Sept. 23-28, 2000.
52. **M. Naraghi-Pour** and H. Liu, "Integrated Voice-Data Transmission in CDMA Packet PCN's," *Proceedings of the International Conference on Communications (ICC00)*, Vol. 2, pp. 1085-1089, June 2000, New Orleans.
53. R. Akl, M. Hegde, **M. Naraghi-Pour** and P. Min, "Call Admission Control Scheme for Arbitrary Traffic Distribution in CDMA Cellular Systems," *Proceedings of the IEEE Wireless Communication and Networking Conference (WCNC'00)*, Chicago, IL, Sept. 23-28, 2000.
54. R. Akl, M. Hegde, **M. Naraghi-Pour** and P. Min, "Cell Placement in a CDMA Network," *Proceedings of the IEEE Wireless Communication and Networking Conference (WCNC'99)*, pp. 903-907, New Orleans, LA, Sept. 21-24, 1999.
55. R. Akl, M. Hegde, **M. Naraghi-Pour** and P. Min, "Flexible Allocation of Capacity in Multi-Cell CDMA Networks," *Proceedings of the IEEE Vehicular Technology Conference (VTC'99)*, pp. 1643-1647, Houston, TX, May 16-20, 1999.
56. C. Vargas, M. Hegde and **M. Naraghi-Pour**, "Blocking Effects of Mobility and reservation in Wireless Networks," *Proceedings of the International Conference on Communications (ICC'98)*, pp. 1612-1616, Atlanta, GA, Jun. 7-12, 1998.
57. **M. Naraghi-Pour**, M. Hegde and R. Pallapotu, "Peer-to-Peer Communication in Wireless Local Area Networks," *Proceedings of the seventh International Conference on Computer Communications and Networks, (ICCCN'98)*, pp. 432-437, Lafayette, LA, Oct. 12-15, 1998.

58. C. Vargas, M. Hegde and **M. Naraghi-Pour**, "Implied Costs in Wireless Networks," *Proceedings of the IEEE Vehicular Technology Conference (VTC'98)* , pp. 904-908, Ottawa, Canada, May 1998.
59. C. Vargas, M. Hegde and **M. Naraghi-Pour**, "Shadow Prices for Modified Least Loaded Routing (MLLR)," *Proceedings of the Twenty-Eighth Southeastern Symposium on System Theory*, pp. 45-49, Baton Rouge, LA, March 31-April 2, 1996.
60. **M. Naraghi-Pour**, M. Hegde and B. Reddy, "A Multiple Shared Memory Switch," *Proceedings of the Twenty-Eighth Southeastern Symposium on System Theory* , pp. 50-54, Baton Rouge, LA, March 31-April 2, 1996.
61. C. Vargas, M. Hegde and **M. Naraghi-Pour**, "Use of Shadow Prices in Wireless Networks," *Proceedings of the 3rd IEEE International Telecommunication Symposium*, pp. 83-87, October 28-31, 1996 Acapulco, Mexico.
62. M. Hegde, **M. Naraghi-Pour** and Y. Li, "The Deflecting Multicast Switch," *Proceedings of the Fourth International Conference on Computer Communications and Networks, (ICCCN'94)* , pp. 332-338, Las Vegas, Nevada, Sept. 20-23, 1995.
63. **M. Naraghi-Pour**, M. Hegde and S. Suresh, "Slot Splitting: A New Schedule for Multi-cast Multi-rate Traffic," *Proceedings of the third International Conference on Computer Communications and Networks, (ICCCN, 94)*, pp. 128-132, San Francisco, CA, Sept. 11-14, 1994.
64. M. Hegde, **M. Naraghi-Pour** and P. Bapat, "Fault-Tolerance in Feedforward Neural Networks for Classification," *Proceedings of 37th Midwest Symposium on Circuits and Systems*, Lafayette, LA, August 1994.
65. M. Hegde, **M. Naraghi-Pour** and P. Bapat, "Learning Algorithms for Fault-Tolerance in Radial Basis Function Networks," *Proceedings of 37th Midwest Symposium on Circuits and Systems*, Lafayette, LA, August 1994.
66. **M. Naraghi-Pour**, M. Hegde and S. Suresh, "Scheduling multi-rate traffic in time-multiplex Switches," *Proceedings of the International Symposium on Information Theory* , p. 406, July 1994, Trondheim, Norway.
67. P. Bapat, M.V. Hegde and **M. Naraghi-Pour**, "Fault Tolerant Radial Basis Function Networks," *Proceedings of World Congress on Neural Networks* , San Diego, CA, June 1994.
68. C.R. Chow, C.H. Chu, **M. Naraghi-Pour** and M. Hegde, "Genetic Algorithm Approach to Fault-Tolerant Neural Networks Design," *Proceedings of World Congress on Neural Networks*, vol. III, pp. 696-701, San Diego, CA, June 1994.
69. C. Vargas, M.V. Hegde, **M. Naraghi-Pour** and P. Min, "Shadow Prices for State Dependent Routing," *Proceedings of 25th Annual Conference on Information Sciences & Systems*, pp. 243-248, Princeton, March 1994.



70. **M. Naraghi-Pour**, M. Hegde and P. Bapat, "Fault Tolerance Design of Feedforward Networks," *Proceedings of World Congress on Neural Networks*, Portland, OR, vol. 3, pp. 568-571, July 11-15, 1993.
71. M. Hegde, **M. Naraghi-Pour** and C. Jonelagada, "Routing Using Empirical Prediction," *Proceedings of the Conference on Information Sciences and Systems*, Princeton University, pp. 918-923, March 19-22, 1992.
72. **M. Naraghi-Pour**, M. Hegde, S. Das and N. Arora, "Adaptive Trellis and DPCM Coding of Composite Processes," *Proceedings of the Twenty-Ninth Annual Allerton Conference on Communication, Control and Computing*, pp. 958-967, Oct. 2-4, 1991.
73. J.L. Aravena, M. Hegde and **M. Naraghi-Pour**, "Neural Nets with Prespecified Memories," *Proceedings of the Twenty-Ninth Annual Allerton Conference on Communication, Control and Computing*, pp. 737-738, Oct. 2-4, 1991.
74. M. Hegde, **M. Naraghi-Pour**, G. Nandakumar, "Limitations of Constrained Connectivity Neural Networks," *Proceedings of the Twenty-Ninth Annual Allerton Conference on Communication, Control and Computing*, pp. 739-740, Oct. 2-4, 1991.
75. M. Hegde and **M. Naraghi-Pour** and X. Jiang, "Iterative Methods for Neural Network Design," *Proceedings of IJCNN*, p. II A-962, July 1991.
76. **M. Naraghi-Pour**, M. Hegde and F. Bourge, "A Comparison of Two Neural Network Architectures for Vector Quantization," pp. I.391-I.396, *Proceedings of IJCNN*, July 8-12, 1991.
77. S. Ramkumar, M. Hegde and **M. Naraghi-Pour**, "Depth-First Fault Tolerant Routing in Folded-Hypercubes," *Proceedings of the Conference on Information Sciences and Systems*, The Johns Hopkins, pp. 874-881, March 20-22, 1991.
78. N. Arora, M. Naraghi-Pour and M. Hegde, "Adaptive DPCM Encoding of Regenerative Composite Processes," *Proceedings of the Conference on Information Sciences and Systems*, The Johns Hopkins University, pp. 24-28, March 20-22, 1991.
79. X. Jiang, M. Hegde and **M. Naraghi-Pour**, "Neural Network Design Using Linear Programming and Relaxation," *International Symposium on Circuits and Systems*, pp. 1090-1093, New Orleans, May 1-3, 1990.
80. M. Hegde, **M. Naraghi-Pour** and X. Chen, "Convolutional Codes for Finite-State Channels," *International Symposium on Information Theory*, p. 63, Jan. 14-19, 1990.
81. **M. Naraghi-Pour**, "Short Trellis Codes for Continuous Phase Frequency Shift Keying," *Proceedings of the Conference on Information Sciences and Systems*, the Johns Hopkins University, pp. 254-259, March 22-24, 1989.
82. **M. Naraghi-Pour** and D. Neuhoff, "On the Convergence of the Projection Method for an Autoregressive Source and a Matched DPCM Code," *Proceedings of 1988 Conference on Advances in Communication and Control Systems*, pp. 211-219, Oct. 19-21, 1988.

83. **M. Naraghi-Pour** and D. Neuhoff, "DPCM Encoding of Regenerative Composite Random Processes," *Proceedings of the Conference on Information Sciences and Systems*, The Johns Hopkins University, pp. 256-261, March 25-27, 1987.
84. **M. Naraghi-Pour** and D. Neuhoff, "On the Analysis of Mismatched DPCM for Gauss Markov Sources," *Proceedings of the Conference on Information Sciences and Systems*, Princeton University, pp. 409-414, March 19-22, 1986.
85. N. Moayeri, **M. Naraghi-Pour**, and D. Neuhoff, "Some New Results on Tree Coding of Images," *Twenty First Annual Allerton Conference on Communication, Control and Computing*, Oct. 5-7, 1983.

## 7. National/International Presentations

*In addition to presentation of conference papers, the following presentations were given.*

1. **M. Naraghi-Pour**, "Context-Based Unsupervised Learning and Feature Ranking," 3<sup>rd</sup> Global Summit and Expo on Multimedia and Artificial Intelligence, July 21-22, 2017, Lisbon, Portugal.
2. **M. Naraghi-Pour**, "Cooperative Localization, Navigation and Tracking Using Signals of Opportunity," RCP (Research Competitiveness Program) Annual Review, Sept.22-24, Dayton, OH.
3. **M. Naraghi-Pour**, "Southeast Symposium on Contemporary Engineering Topics," (SSCET), Sept. 19, 2014.
4. **M. Naraghi-Pour**, "Secure Communication between Android OS Devices," Air Force Research Laboratory, Rome, NY, July 15, 2014.
5. **M. Naraghi-Pour**, "Optimal Defense Strategies against Malicious Behavior," Minority Leaders Program, Dayton, OH, Sept. 23, 2013.
6. Gustavo Chacon-Rojas, Xavier Dillard and **M. Naraghi-Pour**, "Internet Interface based on Embedded Systems for Smartphones Applications," Poster Presentation, Minority Leaders Program, Dayton, OH, Sept. 23, 2013.
7. **M. Naraghi-Pour**, "Localization and Navigation in GPS-Denied Environments," Minority Leaders Program Annual Review, Baton Rouge, LA, Nov. 2011.
8. A. Nguyen, G. Chacon, **M. Naraghi-Pour**, "Hardware Implementation of Indoor Localization based on RSSI Measurements," Poster presentation, Minority Leaders Program Annual Review, Baton Rouge, LA, Nov. 2011.
9. R. Cortez, M. Naraghi-Pour, "Analysis by Synthesis Compression of De-chirped Spotlight-Mode SAR Raw Data," Poster presentation, Minority Leaders Program Annual Review, Dayton, OH, April 2010.
10. **M. Naraghi-Pour**, "SAR Video Phase History Compression," Minority Leaders Program Annual Review, Dayton, OH, April 2010.
11. **M. Naraghi-Pour**, "Automatic Perimeter Security," Minority Leaders Program Annual Review, Dayton, OH, April 2010.

12. Del Spangler, Andy Nguyen, and Xavier Dillard, **M. Naraghi-Pour**, "Automated Perimeter Security," Poster presentation, Minority Leaders Program Annual Review, Dayton, OH, April 2010.
13. **M. Naraghi-Pour**, "Adaptive modulation and adaptive power allocation in OFDM," Minority Leaders Program Annual Review, Nashville, TN, Sept. 2006.
14. **M. Naraghi-Pour**, "Interference Avoiding Systems/Cognitive Radios," Minority Leaders Program Annual Review, Dayton, OH, March 2006.
15. **M. Naraghi-Pour**, "Adaptive Power Allocation and Modulation," Minority Leaders Program Annual Review, Dayton, OH, March 2006.
16. **M. Naraghi-Pour**, "Automatic Modulation Classification," Minority Leaders Program Annual Review, Baton Rouge, LA, August 2005.

## 8. Invited Talks

1. **M. Naraghi-Pour**, "Hypothesis Testing in Wireless Sensor Networks in the Presence of Misbehaving Nodes," International Conference on Signal Processing and Integrated Networks (SPIN-2015), Delhi NCR, India, 19-20 Feb. 2015.
2. **M. Naraghi-Pour**, "Overview of my current research in wireless sensor networks and cognitive radio networks," and "Spectrum Monitoring for Cognitive Radios," Monterrey Institute of Technology and Higher Education (ITESM), Monterrey, Mexico, Oct. 31-Nov. 2, 2013.
3. **M. Naraghi-Pour**, "MPLS VPNs," A half-day tutorial presentation at the International Conference on Networking (ICN'01), Colmar, France, 2001.
4. **M. Naraghi-Pour**, "Bandwidth and Buffer Dimensioning for Guaranteed Quality of Service in Wireless ATM Networks," Invited talk, National Institute of Standards and Technology, 1999.
5. **M. Naraghi-Pour**, "Convolutional Codes for Continuous Phase Frequency Shift Keying," Invited Talk, IBM Almaden Research Center, San Jose, CA, 1990.

## 9. Teaching

**Summary:** Dr. Naraghi-Pour has taught 22 different courses at freshman, junior, senior and graduate levels. He has developed five new courses and has significantly revised and updated five other courses in the curriculum. The updates were significant enough to require a new catalog number. He has also developed a special topics course. In addition, he has developed the McNeil RF/Communications Laboratory and the PreSonus Digital Signal Laboratory.

### 9.1 Teaching History and Student Evaluations

#### 9.1.1 Student evaluation rating

Teaching evaluation forms for Fall 2018 and later were changed by LSU. They show the overall effectiveness and the scale is 0-5. Moreover, the ECE average is across the four years and is no longer separated by course level.

### 9.1.2 Dr. Naraghi-Pour's Teaching History and Student Evaluations

Semester	Course number and title	Instructional Feedback	ECE Average	Enrollment
<b>Spring 2023</b>	EE7600: Machine Learning, A System Perspective	<b>4.58</b>	<b>4.22</b>	<b>18</b>
	EE 1810 (Section 1): Introduction to ECE	<b>4.10</b>	<b>4.22</b>	<b>43</b>
	EE 1810 (Section 2)	<b>3.93</b>	<b>4.22</b>	<b>35</b>
	EE 1810 (Section 3)	<b>4.20</b>	<b>4.22</b>	<b>31</b>
<b>Fall 2022</b>	EE 3610: Signals and Systems	<b>5.0</b>	<b>4.22</b>	<b>33</b>
	EE 1810 (Section 1): Introduction to ECE	<b>4.54</b>	<b>4.22</b>	<b>31</b>
	EE 1810 (Section 2)	<b>4.34</b>	<b>4.22</b>	<b>31</b>
	EE 1810 (Section 3)	<b>4.42</b>	<b>4.22</b>	<b>29</b>
<b>Spring 2022</b>	EE7600: Machine Learning, A System Perspective	<b>4.67</b>	<b>4.08</b>	<b>5</b>
	EE 1810 (Section 1): Introduction to ECE	<b>4.63</b>	<b>4.08</b>	<b>41</b>
	EE 1810 (Section 2)	<b>3.94</b>	<b>4.08</b>	<b>34</b>
	EE 1810 (Section 3)	<b>4.51</b>	<b>4.08</b>	<b>31</b>
<b>Fall 2021</b>	EE 3610: Signals and Systems	<b>4.13</b>	<b>4.19</b>	<b>44</b>
	EE 1810 (Section 1): Introduction to ECE	<b>4.30</b>	<b>4.19</b>	<b>31</b>
	EE 1810 (Section 2)	<b>3.91</b>	<b>4.19</b>	<b>30</b>
	EE 1810 (Section 3)	<b>4.10</b>	<b>4.19</b>	<b>30</b>
<b>Spring 2020</b>	EE7600: Machine Learning, A System Perspective	<b>4.42</b>	<b>3.97</b>	<b>5</b>
<b>Fall 2020</b>	EE 3610: Signals and Systems	<b>4.16</b>	<b>3.94</b>	<b>35</b>
<b>Spring 2020</b>	EE7600: Machine Learning, A System Perspective	<b>4.86</b>	<b>4.13</b>	<b>10</b>
	EE3150: Probability for ECE	<b>3.63</b>	<b>4.13</b>	<b>16</b>
<b>Fall 2019</b>	EE3610: Signals and Systems	<b>4.0</b>	<b>3.93</b>	<b>23</b>
<b>Spring 2019</b>	EE3150: Probability for ECE	<b>3.82</b>	<b>4.03</b>	<b>24</b>
<b>Fall 2018</b>	EE3150: Probability for ECE	<b>4.0</b>	<b>3.85</b>	<b>15</b>

The average student evaluations for the Division of Electrical and Computer Engineering at Louisiana State University for the spring 2012 were as follows.

Course level	Instructional Technique	Overall Effectiveness	Quality of Course was excellent
2XXX	2.879	2.850	2.739
3XXX	2.705	2.550	2.387
4XXX	3.338	3.446	3.206
7XXX	3.673	3.735	3.623

Semester	Course number and title	Instructional Technique	Instructional Support Effort	Overall Effectiveness	Enrollment
Spring 2018	sabbatical leave				
Fall 2017	EE 7615: Digital Communication I	3.5	3.75	3.5	2
	EE7091: Independent Study	4	4	4	2
Spring 2017	EE7660: Random Processes II	3.533	3.700	3.600	5
Fall 2016	EE3150: Probability for ECE	3.186	3.154	3.000	23
Spring 2016	EE3150: Probability for ECE	2.981	3.371	3.375	28
Fall 2015	3060: Special topics in DSC and Communications	3.000	3.143	2.333	7
Spring 2015	EE3150: Probability for ECE	2.596	2.822	2.304	52
	EE4003-5, EE4003-7: DSP Algorithms and Implementation	2.792	3.218	3.125	12
Fall 2014	EE7615: Digital Communication I	3.8	3.75	3.8	5
Spring 2014	EE4003-5, EE4003-6: DSP Algorithms and Implementation	3.463	3.528	3.556	18
Fall 2013	EE7600: Error Control Coding	3.667	3.650	3.600	5
	EE3610: Signals and Systems	3.275	3.609	3.565	28
Spring 2013	EE7660: Random Processes II	3.375	3.625	3.75	4
Fall 2012	EE3610: Signals and Systems	3.352	3.431	3.500	37
	EE7600: Information Theory	3.000	3.000	3.000	3
Spring 2012	EE 7600: Error Control Coding	3.889	3.833	4.000	5
Fall 2011	EE3610: Signals and Systems	2.895	2.906	2.625	38
	EE7615: Digital Communication I	3.833	3.812	4.000	6

<b>Spring 2011</b>	EE7660: Random Processes II	3.463	3.500	3.778	10
<b>Fall 2010</b>	EE4002: RF Engineering	3.764	3.792	3.833	16
	EE7615: Digital Communication I	3.583	3.625	3.750	4
<b>Spring 2010</b>	EE7674: Wireless Communication Networks	3.857	3.821	4.000	7
<b>Fall 2009</b>	EE4000: Audio Signal Processing	3.167	3.214	3.000	7
	EE7600: Error Control Coding	3.667	3.611	3.778	9
<b>Spring 2009</b>					
<b>Fall 2008</b>	EE7620: Digital Communication	3.692	3.760	3.857	7
<b>Spring 2008</b>	EE7674: Wireless Communication Networks	3.792	3.812	3.750	5
<b>Fall 2007</b>	EE3610: Signals and Systems	2.737	2.992	2.333	42
<b>Spring 2007</b>	EE7674: Wireless Communication Networks	3.514	3.591	3.500	8
<b>Fall 2006</b>	EE7620: Digital Communication	3.167	3.625	2.5	10
<b>Spring 2006</b>	EE7674: Wireless Communication Networks	3.333	3.500	3.333	4
<b>Fall 2005</b>	EE4660: Random Processes I	3.417	3.244	3.309	12
<b>Spring 2005</b>	EE7674: Wireless Communication Networks	3.333	3.417	3.667	3
<b>Fall 2004</b>	EE4610: Analog Communication	3.273	3.250	3.000	21
	EE4660: Random Processes I	3.610	3.769	3.769	16
<b>Spring 2004</b>	EE7000: Routing in Communication networks	4.000	4.000	4.000	7
<b>Fall 2003</b>	EE7670: Communication Networks	3.393	3.393	3.000	14
<b>Spring 2003</b>	EE7000: Wireless Communication, System Design and Implementation	3.429	3.643	3.857	7
	EE7660: Random Processes II	3.500	3.650	3.400	6
<b>Fall 2002</b>	EE7670: Communication Networks	3.643	3.714	3.571	8

<b>Spring 2002</b>	EE3120: Linear Systems	2.420	2.689	2.300	69
	EE7674: Wireless Communication Networks	3.271	3.385	3.400	15
<b>Spring 2000</b>	EE7000: Routing in Communication networks	3.500	3.444	3.500	14
<b>Fall 1999</b>	EE7000	3.944	4.000	4.000	6
	EE7672: Integrated Broadband Networks	3.958	3.938	4.000	4
<b>Spring 1999</b>	EE7674: Wireless Communication Networks	3.722	3.625	3.833	6
<b>Fall 1998</b>	EE7672: Integrated Broadband Networks	3.306	3.417	3.500	9
	EE7620: Digital Communication	3.786	3.821	3.833	7
<b>Spring 1998</b>	EE7674: Wireless Communication Networks	3.098	3.188	3.222	11
	EE4610: Analog Communication	3.000	3.063	3.000	4
<b>Fall 1997</b>	EE7620: Digital Communication	2.881	3.00	3.143	7
<b>Spring 1997</b>	EE7000	2.146	1.875	2.000	8
<b>Fall 1996</b>	EE7000; Coding Theory	2.900	2.575	2.700	11
	EE4640: Introduction to Random Process in Engineering	2.776	2.958	2.889	20
<b>Spring 1996</b>	EE7660: Random Processes II	2.235	2.167	2.333	4
<b>Fall 1995</b>	EE7640: Error Control Coding	2.957	3.250	3.250	5
	EE4640: Introduction to Random Process in Engineering	3.154	3.194	3.125	12
<b>Spring 1995</b>	EE7650: Computer Communication	3.667	3.542	3.833	6
<b>Fall 1994</b>	EE4640: Introduction to Random Process in Engineering	3.375	3.625	3.625	16
	EE7000:	3.054	3.167	3.000	4
<b>Spring 1994</b>	EE7660: Random Processes II	4.000	4.000	4.000	4
<b>Fall 1993</b>	EE4640: Introduction to Random Process in Engineering	3.393	3.857	3.429	15
	EE7620: Digital Communication	3.730	3.813	4.000	6

<b>Spring 1993</b>	EE7660: Random Processes II	3.367	3.333	3.000	6
<b>Fall 1992</b>	EE7000:	3.214	3.357	3.143	11
	EE7620: Data Communication	3.250	3.250	3.200	11
<b>Spring 1992</b>	EE7650: Computer Communication	3.405	3.444	3.143	9
<b>Fall 1991</b>	EE4640: Introduction to Random Process in Engineering	3.783	3.590	3.600	14
	EE7620: Data Communication	3.667	3.607	3.750	10
<b>Spring 1991</b>	EE7650: Computer Communication	3.125	3.188	3.250	14
<b>Fall 1990</b>	EE4640: Introduction to Random Process in Engineering	3.645	3.653	3.667	23
	EE7620: Data Communication	3.583	3.583	3.667	17
<b>Spring 1990</b>	EE7000:	3.6000	3.567	3.800	10
<b>Fall 1989</b>	EE4150: Digital Signal Processing	2.671	2.841	2.590	42
	EE4640: Introduction to Random Process in Engineering	3.516	3.625	3.9	12
<b>Spring 1989</b>	EE7630: Detection and Estimation	3.470	3.187	3.500	4
<b>Fall 1988</b>	EE4640: Introduction to Random Process in Engineering	3.666	3.750	4.000	5
	EE7620: Data Communication	3.222	3.416	3.714	4
<b>Spring 1988</b>	EE7640: Information Theory	3.500	3.500	3.666	4
<b>Fall 1987</b>	EE4150: Digital Signal Processing	2.697	2.851	2.555	42

## 9.2 New Courses Developed

1. EE3150: Probability for Electrical and Computer Engineering
2. EE3610: Signals and Systems
3. EE4610: Analog Communication
4. EE4625: Digital Communication and Networking
5. EE4660: Random Processes I
6. EE7660: Random Processes II
7. EE 7615: Digital Communication I
8. EE7670: Communication Networks
9. EE7672: Switching and Broadband Networks



10. EE7674: Wireless Communication Networks
11. EE7600: Machine Learning, a System Perspective (Special Topics)

### 9.3 New Laboratories Developed

1. McNeil RF/Communications Laboratory
2. PreSonus Digital Signal Processing Laboratory

### 9.4 Graduate Student Supervision

#### 9.4.1 Ph.D. Dissertations Directed

1. Mohammed Rashid, (Ph.D. Dissertation) ECE Department, Graduated March 2021.  
Dissertation title: *Channel Estimation in Multi-user Massive MIMO Systems by Expectation Propagation Based Algorithms.*
2. Sima Sobhiyeh, (Ph.D. Dissertation) ECE Department, Graduated May 16, 2018.  
Dissertation title: *Hypothesis Testing and Model Estimation with Dependent Observations in Heterogeneous Sensor Networks.*
3. Kamran Ghavami, (Ph.D. Dissertation) ECE Department, Graduated August 2017.  
Dissertation title: *Channel Estimation and Symbol Detection in Massive MIMO Systems Using Expectation Propagation.*
4. Hui Sun, (Ph.D. Dissertation) ECE Department, Graduated August 2016. Dissertation title: *Relay Selection Strategies for Multi-hop Cooperative Networks.*
5. Erfan Soltanmohammadi, (Ph.D. Dissertation) ECE LSU, Graduated August 2014.  
Dissertation title: *Spectrum Sensing, Spectrum Monitoring and Security in Cognitive Radios.*
6. Gustavo Chacon Rojas, (Ph.D. Dissertation) ECE LSU, Graduated May 2014. Dissertation title: *Localization and Security Algorithms for Wireless Sensor Networks and the Usage of Signals of Opportunity.*
7. Mahdi Orooji, (Ph.D. Dissertation) ECE LSU, Graduated May 2013. Dissertation title: *Fast and Reliable Detection of Incumbent Users in Cognitive Radios.*
8. Xiang Gao (Ph.D. Dissertation) ECE LSU, Graduated May 2007. Dissertation title: *Channel Modeling and Resource Allocation in OFDM Systems.*

#### 9.4.2 M.S. Theses Directed

1. Mohammed Rashid, (M.S. Thesis) ECE LSU, Graduated May 2018.  
Thesis title: *Multitarget Joint Delay and Doppler Shift Estimation in Bistatic Passive Radar Estimation in Bistatic Passive Radar*
2. Matthew Anakwue (M.S. Thesis) ECE LSU, Graduated Dec. 2012. Thesis title: *Performance of Multi-frequency UWB-OFDM SAR in Deception Jamming Scenarios.*
3. Reza Soosahabi (M.S. Thesis) ECE LSU, Graduated August 2011. Thesis title: *Secure Distributed Detection in Bandwidth-Constrained Wireless Sensor Networks.*

4. Yang, Lu De (M.S. Thesis) ECE LSU, Graduated August 2011, Thesis title: *Implementation of a Wireless Sensor Network with eZ430-RF2500 Development Tools and MSP430FG4618/F2013 Experimenter Boards from Texas Instruments*
5. Niharika Konakalla (M.S. Thesis) ECE LSU, Graduated May 2010. Thesis title: *Adaptive quantization in wireless sensor networks with encryption.*
6. Venkata Sriram Siddhardh Nadendla (M.S. Thesis) ECE LSU, Graduated August 2009. Thesis title: *Secure Distributed Detection in Wireless Sensor Networks via Encryption of Sensor Decisions.*
7. Krishna Kishore Gunturu (M.S. Thesis) ECE LSU, Graduated Dec. 2007. Thesis title: *Optimum Energy Allocation for Detection in Wireless Sensor Networks.*
8. Rohit Sharma (M.S. Thesis) ECE LSU, Graduated May 2005. Thesis title: *Subscriber Location under MAI in CDMA Networks.*
9. Vinay Desai (M.S. Thesis) ECE LSU, Graduated May 2005. Thesis title: *Traffic Engineering in MPLS VPN's.*
10. Pooja S Aniker (M.S. Thesis) ECE LSU, Graduated May 2005. Thesis title: *Traffic Engineering and path Protection in Multiprotocol Label Switching Virtual private networks.*
11. Chung-Yu Wei (M.S. Thesis) ECE LSU, Graduated Dec. 2003. Thesis title: *Path Restoration with QoS and Label Constraints in MPLS Networks.*
12. Cheow Wan Neoh (M.S. Thesis) ECE LSU, Graduated Dec. 1999. Thesis title: *Scheduling Policies and Call Admission Regions for Wireless ATM Networks.*
13. Huitao Liu (M.S. Thesis) ECE LSU, Graduated May 1998. Thesis title: *A MAC Protocol for Integrated Voice-Data Transmission in Packet PCN's.*
14. Ramesh Pallaputo (M.S. Thesis) ECE LSU, Graduated Dec. 1996. Thesis title: *Peer-to-Peer Communication in Wireless Networks using slotted Aloha.*
15. S. Suresh (M.S. Thesis) ECE LSU, Graduated Nov. 1993. Thesis title: *Scheduling of Multi-rate Traffic in a Time-Multiplex Switch.*
16. Minli Zhou, (Co-advised with M. Hegde) (M.S. Thesis) ECE LSU, Graduated May 1993. Thesis title: *DQDB Unfairness Improvement by Optimal Bandwidth Allocation.*
17. Sujan Das (M.S. Thesis) ECE LSU, Graduated May 1992. Thesis title: *Problems in Source and Joint Source Channel Coding.*
18. Namit Arora (M.S. Thesis) ECE LSU, Graduated Dec. 1991. Thesis title: *Adaptive Differential Pulse Code Modulation of Regenerative Composite Sources.*
19. C. Chirabowornkul, (Co-advised with M. Hegde) (M.S. Thesis) ECE LSU, Graduated 1990. Thesis title: *Performance Evaluation of a State-Dependent Routing in Circuit-Switched Networks.*
20. Fabrice Bourge, (Co-advised with M. Hegde) (M.S. Thesis) ECE LSU, Graduated August 1990. Thesis title: *Vector Quantization Using Neural Networks.*
21. Xiaoshi Jiang, (Co-advised with M. Hegde) (M.S. Thesis) ECE LSU, Graduated May 1990. Thesis title: *Neural Network Design Using Linear Programming and Relaxation.*

#### 9.4.3 MS Project supervision

1. Ricardo Cortez, ECE LSU. Graduated Dec. 2010. Project: *Compression of SAR video phase history*.
2. Adam Landry, ECE LSU. Graduated Dec. 2010. Project: *Tone Nulling in OFDM*.
3. Ajay Varma Indukuri (M.S. Thesis) Engineering Science, LSU, Graduated Nov. 2009. Project title: *Remote File Synchronization*.
4. Rahman Tashakkori, (M.S. Thesis) Engineering Science, LSU, Graduated Dec. 1995. Project title: *Executive Weight Loss*.

#### 9.4.4 Undergraduate Student Supervision

1. Carmen Tillman, ECE LSU, Graduated 2009. Project: *Image processing for unmanned ground vehicle (Mikerobot)*.
2. Del Spangler, ECE LSU, Graduated 2010, Project: *PID controller for unmanned ground vehicle (Mikerobot)*
3. Andy Nguyen, ECE LSU, Graduated 2012. Project: *Joystick for remote operation of unmanned ground vehicle (Mikerobot)*
4. Xavier Dillard, ECE LSU, Currently in the program. Project: *Programming Texas Instrument eZ430 sensors and MSP430 boards*
5. Nathan Kuhns, Junior from Univ. of Arkansas (2009), summer mentoring, Predoctoral Scholars (PDSI).

#### 9.4.5 Capstone Project Supervision

1. Reed Babin, Lawrence Gonzalez, Kameron Southichark, Cameron Wiley, **Wireless Transmission Systems for Cone Penetrometer** (fall 2022-spring 2023).
2. Austin Copper, Charles Seeds, John Reid, Matthew Drago, Togma Chauvin: **Automated Jack Plate Controller Unit** (spring 2017-fall 2017)
3. Michael Cole, Tyler Hill, Walker Legrand, Brody Taylor, Tanner White: **The Virgil Project** (spring 2017-fall 2017)
4. Jack Perry, Randy Watson, Justin Cifero, Bryce Menge: **ParkWise** (fall 2012-spring 2013)
5. John A Boudreaux, Justin P Breaux, Anthony T Schech, Gilles A Yougoubare, **Smart Bird** (spring 2013-fall 2013)
6. Charles Cobb, Merrel Holley, William Rody, Hayden LeJeune: **Voice Controlled Robot** (spring 2012- fall 2012)
7. Jonathan Alexander, Ryan Roten, Karl Oelschleager, Ryan Thompson, James St. Pierre: **DSP Guitar Effect Pedal** (fall 2010- spring 2011)

#### 9.4.6 Post-doctoral Fellow Supervision

1. Takeshi Ikuma Dec. 2015-present.

2. Nizar Tayem August 2006- August 2007
3. Takeshi Ikuma August 2007-August 2011

#### **9.4.7 Supervised Student Awards**

1. Hui Sun: Travel grant to present two papers at the MILCOM 2014 conference, Baltimore, MD.
2. Erfan Soltanmohammadi: travel grant to present two papers at the MILCOM 2013 conference, San Diego, CA.
3. Erfan Soltanmohammadi: travel grant to present two papers at the MILCOM 2012 conference, Orlando FL.
4. Mahdi Orooji: travel grant to present a paper at the MILCOM 2012 conference Orlando FL.

#### **9.4.8 Graduate Committees**

##### ***Member of Ph.D. Dissertation Committees***

1. Mohadese Movahednia, (Ph.D. Dissertation), ECE LSU, Graduated 2023
2. Seddigheh Norouziasl, (Ph.D. Dissertation), ECE LSU, Graduated 2023
3. Fouad Hasan, (Ph.D. Dissertation), ECE LSU, Graduated 2023
4. Chutian Wu, (Ph.D. Dissertation), ECE LSU, Graduated 2022
5. Md Mahmudul Hasan (Ph.D. Dissertation), ECE LSU, Graduated 2021
6. Farhang Bayat, (Ph.D. Dissertation) ECE LSU, Graduated 2020
7. Hyundeok Kang, (Ph.D. Dissertation), ECE LSU, Graduated 2019
8. Jianming, Zhou, (Ph.D. Dissertation) ECE LSU, Graduated 2017.
9. Iman Khadem, (Ph.D. Dissertation) ECE LSU, Graduated 2014.
10. George Traian Amariuca, (Ph.D. Dissertation) ECE LSU, Graduated 2009.
11. Luo Min, (Ph.D. Dissertation) ECE LSU, Graduated 2006.
12. Jianqiang He, (Ph.D. Dissertation) ECE LSU, Graduated 2005.
13. Robert Akl, (Ph.D. Dissertation), Dept. of EE, Washington University, St. Louis, Graduated May 2000.
14. Cesar Vargas, (Ph.D. Dissertation) ECE LSU, Graduated 1994.

##### ***Member of M.S. Thesis Committees***

1. Martha Cash, (M.S. Thesis) ECE LSU, Graduated 2022
2. John Kennedy, (M.S. Thesis) ECE LSU, Graduated 2021
3. Xia Tian, (M.S. Thesis) ECE LSU, Graduated Dec. 2013.
4. Akkawi, Bandali K. (M.S. Thesis) ECE LSU, Graduated Dec. 2008.
5. Perkins, William (M.S. Thesis) ECE LSU, Graduated 2007.
6. Li, Shoupei (M.S. Thesis) ECE LSU, Graduated 2006.

7. Piron, Phat, (M.S. Thesis) ECE LSU, Graduated 2005.
8. M.B. Reddy (M.S. Thesis) ECE LSU, Graduated 1996.
9. Yong Li, (M.S. Thesis) ECE LSU, Graduated 1995.
10. P. Bapat (M.S. Thesis) ECE LSU, Graduated 1993.
11. C. Jonelagada, (M.S. Thesis) ECE LSU, Graduated 1991.

#### **9.4.9 Member of Ph.D. Committees as Dean's Representative**

1. Osama Osman, (Ph.D. Dissertation) CEE, LSU Dean's representative on General Exam, 2014.
2. Albert, Jeffery (Ph.D. Dissertation) Music, Graduated 2013.
3. Samantha David, College of Education, Dean's representative on General Exam, 2010.
4. Chun, Carolyn, (Ph.D. Dissertation) Mathematics, Graduated 2009.
5. Al-Shammari, Khalid Abdulaziz (Ph.D. Dissertation) Mathematics, Graduated 2006.
6. Maria Lorna Reyes, (Ph.D. Dissertation) Computer Science, Graduated 1998.
7. Shi, Genbao, (Ph.D. Dissertation) Mathematics, Graduated 1995.

## **10. Service**

### **10.1 University Service**

Only committee assignments after 2001 are listed.

1. Acting Chair (2022-)
2. Faculty Search Committee (2022)
3. Chair of ECE Curriculum Committee (2019-2022)
4. Chair/member of Tenure and Promotion Committee (2017-2019)
5. Member of Dept. curriculum committee (2016-2018)
6. Member of ABET, SACS and PEAK committees (2013)
7. Member of Dept. curriculum committee (2013)
8. Chair of faculty search committee (DSP area), 2013
9. Chair of faculty search committee (DSP area), 2012
10. Coordinator for the Communication/DSP area (2008-2012)
11. Graduate Program Advisor (July 2005-July 2008)
12. Member of the Department Chair Search Committee (2002 and 2006)
13. Member of Graduate Studies Committee (2008-2011)
14. Member of Curriculum committee (2003-2005, 2011-)
15. Member of ABET, PEAC and SACS accreditation committees (2005-)
16. Member of ECE/CS merger plan (2012)
17. Member of IT manager search committee (2008)
18. Member of numerous faculty search committees (2002-2007)
19. Member of two ECE Department Chair search committees (2001-2003)
20. Member of LSU CAPITAL search committee (2002-2003)

## 10.2 Professional Service

### 10.2.1 Editorship

1. Associate Editor: Data Science for Communication, Frontiers in Communication and Networking
2. Associate Editor: Frontiers in Electronics
3. Associate Editor: PLOS ONE

### 10.2.2 Professional Memberships

Life Senior Member, Institute of Electrical and Electronics Engineers

### 10.2.3 Conference Technical Program Committee

1. IEEE Future Networks World Forum, 2023, Member of Technical Program Committee
2. IEEE International Conference on Communications (ICC): Mobile and Wireless Networks Symposium, (2023), Member of Technical Program Committee.
3. IEEE 33rd Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC): IEEE PIMRC 2023, Member of Technical Program Committee.
4. IEEE 33rd Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC): IEEE PIMRC 2022, Member of Technical Program Committee.
5. IEEE 2022 International Conference on Internet of Things and Intelligence Systems, Member of Technical Program Committee.
6. IEEE Future Networks World Forum (FNWF), Member of Technical Program Committee, 2022
7. Global Communication Conference (Globecom2022), Mobile and Wireless Networks, Member of Technical Program Committee.
8. IEEE International Conference on Communications (ICC): Mobile and Wireless Networks Symposium, (2022), Member of Technical Program Committee.
9. IEEE International Conference on Communications (ICC): Communication Software and Multimedia Symposium, (2022), Member of Technical Program Committee.
10. IEEE Global Communications Conference: Mobile and Wireless Networks, Virtual Conference, (2021), Member of Technical Program Committee.
11. IEEE International Conference on Communications (ICC): Mobile and Wireless Networks Symposium. (2021), Member of Technical Program Committee.
12. International Conference on Internet of Things and Intelligence System (IoTaIS), 2021, Member of Technical Program Committee.
13. Wireless Networks (IWCMC 2021 Wireless Networking Symposium), Member of Technical Program Committee.
14. International Symposium on Personal, Indoor and Mobile Radio Communications, 2021, Member of Technical Program Committee.
15. 2021 IEEE 4th 5G World Forum (5GWF'21), Member of Technical Program Committee.
16. Global Communication Conference 2018 (Globecom2018), Cognitive Radio and Networks
17. Global Communication Conference 2018 (Globecom2018), Mobile and Wireless Networks
18. Global Communication Conference 2018 (Globecom2018), Communications Software, Services and Multimedia Apps) Symposium
19. International Conference on Communication 2018 (ICC2018)

20. International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC): IEEE PIMRC 2018
21. International Conference on Wireless Networks and Mobile Communications (WINCOM'18)
22. Symposium on Recent Advances in Communication Theory, Information Theory, Antennas and Propagation (CIAP'18)
23. WF-5G'18 (2018 IEEE 1st 5G WORLD FORUM 2018)
24. Vehicular Technology Conference, VTC2018-Spring: Porto, Track: 5. Radio Access Technology and Heterogeneous Networks
25. the Fourth International Symposium on Ubiquitous Networking (UNet'18)
26. Seventh International Conference on Advances in Vehicular Systems, Technologies and Applications, Vehicular2018
27. VEHICULAR 2017, Sixth International Conference on Advances in Vehicular Systems, Technologies and Applications, Nice, France.
28. Globecom2017 MWN (2017 IEEE Global Communications Conference: Mobile and Wireless Networks), Singapore.
29. Globecom2017 CSSMA (2017 IEEE Global Communications Conference: Communications Software, Services and Multimedia Apps), Singapore.
30. International Conference on Wireless Networks and Mobile Communications (WINCOM'17), Rabat, Morocco.
31. 20th International Symposium on Wireless Personal Multimedia Communications (WPMC2017), Bali, Indonesia.
32. Symposium on Recent Advances in Communication Theory, Information Theory, Antennas and Propagation (CIAP'17)
33. 3<sup>rd</sup> International Symposium on Ubiquitous Networking (UNet'17), May 09-12, Casablanca, Morocco.
34. Confluence 2017(Confluence 2017: 7th International Conference on Cloud Computing, Data Science & Engineering).
35. The International Symposium on Ubiquitous Networking (UNet'17).
36. The International Conference on Wireless Networks and Mobile Communications (WINCOM 2016).
37. International Conference on Communications (ICC'16): Mobile and Wireless Networks Symposium.
38. Global Communications Conference (Globecom'16): Mobile and Wireless Networks Symposium.
39. Global Communications Conference (Globecom'16): Communications Software, Services and Multimedia Apps Symposium.
40. Confluence 2016 2016 (Confluence-2016: GLOBAL Technology, Innovation & Entrepreneurship Summit 2016(Global TIE Summit 2016), 6th International Conference on Cloud System and Big Data Engineering).
41. PHY Track: Wireless Communication and Networking Conference (WCNC 2015).
42. MAC Track: Wireless Communication and Networking Conference (WCNC 2015).
43. International Conference on Communications (ICC'15).
44. International Conference on Internet of Vehicles (IOV 2014).
45. International Symposium on Wireless Personal Multimedia Communications (WPMC 2014) .
46. Military Communication Conference (Milcom 2014), Track 1: Cyber Security and Trusted Computing.
47. International Conference on Connected Vehicles & Expo (ICCVE 2014).
48. International Conference on Connected Vehicles and Expo (ICCVE 2013).
49. PHY Track: Wireless Communication and Networking Conference (WCNC 2013).



50. MAC Track: Wireless Communication and Networking Conference (WCNC 2013).
51. PHY Track: Wireless Communication and Networking Conference (WCNC 2012).
52. MAC Track: Wireless Communication and Networking Conference (WCNC 2012).
53. TPC Track Chair-PHY, Wireless Communication and Networking Conference (WCNC 2011).
54. MAC Track: Wireless Communication and Networking Conference (WCNC 2011).
55. Symposium on Communication and Information Theory (IWCMC 2009). Sarnoff 2009 (IEEE Sarnoff Symposium 2009).
56. Cognitive Networks Track of the Symposium on Selected Areas of Communication, IEEE International Conference on Communication, 2009.
57. IASTED International Conference on Wireless and Optical Communications (WOC 2008).
58. IASTED International Conference on Communication Systems, Networks and Applications (Asia CSNA 2007).
59. The IASTED International Conference on Wireless and Optical Communications (WOC 2007).
60. The IASTED International Conference on Communications and Computer Networks (CCN 2006).
61. The IASTED International Conference on Communication Systems and Applications-CSA 2005.
62. Wireless Communication and Networking Conference (WCNC'00).
63. Seventh International Conference on Computer Communications and Networks, (ICCCN'98), Oct. 12-15, 1998.
64. International Conference on Parallel and Distributed Processing Techniques, (PDPTA'97).
65. International Conference on Parallel and Distributed Processing Techniques, (PDPTA'96).
66. Publicity Chair: 1988 International Conference on Advances in Communications and Control Systems.

#### 10.2.4 Conference Session Chair

1. Global Communication Conference 2018 (Globecome2018).
2. 3<sup>rd</sup> Global Summit and Expo on Multimedia and Artificial Intelligence, July 21-22, 2017, Lisbon, Portugal.
3. The 25th International Conference on Computer Communication and Networks (ICCCN 2016).
4. International Conference on Communication (ICC2015)
5. Wireless Communication and Networking Conference (WCNC 2011)
6. International Conference on Communication, Computer and Networking Conference, 2008.
7. International Conference on Wireless Information Networks and Systems, (WINSYS 2007)
8. Wireless Communication and Networking Conference (WCNC'06), OFDM Systems-I.
9. International Conference on Communications (ICC04), Sensor Networks.
10. International Conference on Communications (ICC'98).
11. **Session Organizer:** International Conference on Communications (ICC'98).
12. Communications Session, the Twenty-Eighth Southeastern Symposium on System Theory, March 31-April 2, 1996.
13. Scheduling/Buffer Management Session, Third International Conference on Computer Communications and Networks, Sept. 1994.
14. Signal Processing and Communications Session, Conference on Advances in Communication and Control Systems, Oct. 1988.