

VALENTINE A. AALO

Office:

Department of Computer & Electrical Engineering
And Computer Science
Florida Atlantic University
Boca Raton, Florida 33431
Tel: 561-297-3485
E-mail: aalo@fau.edu

Home:

6621Pondapple Road
Boca Raton, Florida 33433
Tel: 561-883-6317

EDUCATION

Ph.D. Electrical Engineering, Southern Illinois University, Carbondale, IL, 1991.

M.Sc. Electrical Engineering, Southern Illinois University, Carbondale, IL, 1986.

B.Sc. Electrical Engineering, Southern Illinois University, Carbondale, IL, 1984.

EMPLOYMENT HISTORY

8/03 - Present	Professor Department of Computer & Electrical Engineering and Computer Science Florida Atlantic University
8/96 – 7/03	Associate Professor Department of Electrical Engineering Florida Atlantic University
8/91 -7/96	Assistant Professor Department of Electrical Engineering Florida Atlantic University
5/95 - 8/95	Air Force Summer Faculty Research Associate
5/94 - 8/94	Satellite Communications and Networking Group Rome Laboratory Griffiss Air Force Base Rome, New York

AREAS OF RESEARCH INTERESTS

Wireless Communication Systems
Interference Modeling & Mitigation
Multipath Fading, Diversity Techniques
Cooperative Relay Networks
Cognitive Radio Networks
Wireless Sensor Networks
CFAR Processing, Clutter Modeling

TEACHING EXPERIENCE

Undergraduate Courses Taught

STA 4821	Stochastic models for CS
COT 4935	Senior Seminar
EEL 3111	Circuit 1
EEL 4512	Communication Systems
EEL 2161	C for Engineers
EEL 4510	Introduction to Digital Signal Processing
EEL 4541	Probability and Random Processes
EEL 4656	Analysis of Linear Systems
EEL 4914	Engineering Design
EEL 4930	Introduction to Wireless Communications

Graduate Courses Taught

EEL 6532	Information Theory
EEL 6563	Fiber Optic Communications
EEL 5500	Digital Communications
EEL 6537	Detection Theory
EEL 6597	Wireless Personal Communications
EEL 6905	Directed Independent Study

Ph.D. Dissertations Supervised to Completion

8. Dr. S. Pattaramalai, "A Study of Random Sum Statistics: Application to Wireless Network Performance Analysis", December 2007.
7. Dr. M. Awalkeel, "Performance of Mobile LEO Satellite Cellular Systems", April 2005.
6. Dr. T. Piboongunon, "Performance Analysis of Linear Diversity Schemes in Generalized Gamma Fading Channels", April 2005
5. Dr. C. Chayawan, "Performance Studies on Digital Cellular Radio Systems in Non-Gaussian Multipath Fading Environments, October 2002.
4. Dr. J. Dishman, "Blind Source Separation Using Spatial Fourth-Order Cumulant Matrix-Pencil", December 2001.
3. Dr. J. Zhang, "Performance Analysis of Wireless Communication Systems in Multipath Fading Environments with correlated Shadowing and co-channel Interference", August 1999
2. Dr. G. Efthymoglou (co-advisor with Dr. Henry Helmken), "Performance Analysis of DS- CDMA Systems in Multipath Fading Channels", 1997.
1. Dr. O. Ugweje, "Diversity Techniques in Direct Sequence Code Division Multiple Access Communication Systems", 1997.

M. S. E. Theses Supervised to Completion

14. Khrystsina Navumenka, "Statistical and Entropy Considerations for Ultrasound Tissue Characterization", August 2017.

13. Sadrac Blanc, "Physical layer Security of Wireless Transmissions Over Fading Channels", August 2016.
12. A-Bon E. Ackie, "Performance Analysis of Spectrum Sensing Schemes Based on Fractional Order Moments for Cognitive Radios in Alpha-Stable Noise Environments", May 2016.
11. Constantine Mukasa, "Impact of Interference on Connectivity and Outage performances in Wireless communication Networks: Interference-Based Channel Models", August 2013.
10. Jean N. Rene, "Performance Analysis of Slotted ALOHA Protocol in a Weibull Fading Environment", August 2013.
9. Fabiano Kovalski, "System Level Modeling and Simulation with MLDesigner" December 2006
8. C. Argyrides, "Performance Evaluation of a DS/CDMA Packet Transmission System Under Rician Fading Channel Conditions", December 2001.
7. D. Easo, "Performance Analysis of RLP for NAK-Based ARQ Scheme in CDMA2000 Wireless Systems for Random Error Channels", August 2001.
6. C. Jodoin, "Detection of Direct Sequence Spread Spectrum Signals in a Multipath Fading Environment", December 1999.
5. S. Kyperountas, "Performance of Wireless Communication Systems Under Various Data Traffic Density Distributions", August 1998.
4. S. Pattaramalai, "Average Error Rate for MPSK Signals in Nakagami Fading Channels", August 1996.
3. A. Sharma, "Performance of a Multi-base Station Slotted ALOHA for Wireless LAN System in Nakagami Fading", April 1996.
2. J. Jiao, "Matched Filter Bound for Frequency Selective Nakagami Fading Channel" December 1995.
1. R. Sannegowda, "Performance Study of Some Diversity Combining Schemes in a Nakagami Fading Environment", February 1994.

Senior Design Projects Supervised

Supervised over 25 Senior Projects to completion on topics in different areas of Communications

PUBLICATIONS

Refereed Journal Publications

50. V. Aalo, C. Mukasa, and G. Efthymoglou, "Effect of mobility on the outage and BER performances of digital transmissions over Nakagami- m fading channels", *IEEE Trans. Veh. Tech* , vol.65, no. 4, pp. 2715-2721, April 2016.
49. V. Aalo, K. Peppas, G. Efthymoglou, "Performance of CA-CFAR Detectors in Nonhomogeneous Positive Alpha-Stable Clutter", *IEEE Transactions on Aerospace and Electronics Systems*, vol.51, no. 3, pp. 2027-2038, July 2015.
48. V. Aalo and C. Mukasa, "Impact of Interference on the Coverage and Connectivity of Ad hoc Networks in a Fading Environment", *Journal of Electrical and Computer Engineering*, vol. 2015, Article ID 51388, 5 pages, 2015. doi: 10.1016/j.aeue.2015.04.003.

47. K. Peppas, G. Efthymoglou, V. Aalo, M. Alwakeel, and S. Alwakeel, "Energy detection of unknown signals in gamma-shadowed Rician fading environments with diversity reception", *IET Commun* , vol. 9, no.2, pp. 196-210, 2015.
46. V. Aalo, K. Peppas, G. Efthymoglou, M. Alwakeel, and S. Alwakeel, "Serial amplify-and-forward relay transmission systems in Nakagami- m fading channel with a Poisson interference field", *IEEE Trans. Veh. Tech* , vol. 63, no.5, pp. 2183-2196, June 2014.
45. V. Aalo, K. Peppas, G. Efthymoglou, M. Alwakeel, and S. Alwakeel, "Evaluation of average bit error rate for wireless networks with alpha-stable interference", *Electronics Letters* , vol. 50, no.1, pp. 47-49, 2 Jan. 2014.
44. V. Aalo, G. Efthymoglou, T. Soithong, M. Alwakeel, and S. Alwakeel, "Performance analysis of a multihop amplify-and-forward relaying system in Rayleigh fading channel with a Poisson interference Field", *IEEE Trans. Wireless Comm* , vol. 13, no.1, pp. 24-35, Jan. 2014.
43. T. Soithong, V. Aalo, G. Efthymoglou, and C. Chayawan, "Outage Analysis of Multihop Relay Systems in Interference-Limited in Nakagami- m Fading Channels", *IEEE Trans. Veh. Tech.* Vol. 61, no. 3, pp.1451-1457, March 2012.
42. T. Soithong, V. Aalo, G. Efthymoglou, and C. Chayawan, "Performance of Multihop Relay Systems with Co-Channel Interference in Rayleigh Fading Channels", *IEEE Commun. Lett.* Vol. 15, no. 8, pp.836-838, August 2011.
41. N. Bissias, G. P. Efthymoglou, and V. A. Aalo, "Performance analysis of dual-hop relay systems with single relay selection in composite fading channels", *International Journal of Electronics and Communications (AEU)*, doi:10.1016/j.aeue.2011.04.013, 2011.
40. V. A. Aalo and G. P. Efthymoglou, "Effect of Correlated Non-Gaussian Quadratures on the Performance of Binary Modulations", *Journal of Electrical and Computer Engineering (JECE)*, vol. 2011, Article ID 176486, doi:10.1155/2011/176486, 6 pages, 2011.
39. N. Bissias, G. P. Efthymoglou, and V. A. Aalo, "Performance of multihop relay systems over composite fading channels", *Wireless Communications and Mobile Computing*.
38. G. P. Efthymoglou, V. A. Aalo and N. Bissias, "On the Error Analysis of Dual-Hop Amplify

and-Forward Relaying in Generalized-K Fading Channels”, *Journal of Electrical and Computer Engineering*, vol. 2010, Article ID 584594, 5 pages, 2010.
doi:10.1155/2010/584594.

37. G.P. Efthymoglou, N.Y. Ermolova, and V.A. Aalo, “Channel capacity and average error Rates in generalised-K fading channels”, *IET Communications*, vol.4, no. 1, pp.1364-1372, 2010.
36. S. Pattaramalai, V. A. Aalo, and G. P. Efthymoglou, “Evaluation of call performance in cellular networks with generalized cell dwell time and call holding time distributions in the presence of channel fading”, *IEEE Transactions on Vehicular Technology*, vol. 58, no.6, pp. 3002-3013, July 2009.
35. S. Pattaramalai, V. A. Aalo, and G. P. Efthymoglou, “Evaluation of call performance in cellular networks with generalized cell dwell time and call holding time distributions in the presence of channel fading”, *IEEE Transactions on Vehicular Technology*, vol. 58, no.6, pp. 3002-3013, July 2009.
34. S. Pattaramalai and V. A. Aalo, “Distribution of random sum cell dwell times in wireless networks”, *Electronics Letters*, vol.44, no.4, pp.301-302, 14 February 2008.
33. V. A. Aalo, G. P. Efthymoglou and C. Chayawan, “On the envelope and phase distributions for correlated Gaussian quadratures”, *IEEE Communications Letters*, vol. 11, no.12, pp. 985- 987, December 2007.
32. M. Alwakeel and V. A. Aalo, “New cell residence time models for mobile LEO satellite networks”, *IEEE Transactions on Vehicular Technology*, vol. 56, no.5, pp.3060-3072, September 2007.
31. V.A. Aalo, T. Piboongunon, G.P. Efthymoglou and C.-D. Iskander, “Performance of diversity receivers in generalized gamma fading channels”, *IET Communications*, vol.1, no.3, pp. 341-347, June 2007.
30. M. Awakeel and V. A. Aalo, “A teletraffic performance study of Mobile LEO-Satellite Cellular networks with arbitrary call duration distribution”, *IEEE Transactions on Vehicular Technology*, vol.55, no.2, pp.583-596, March 2006.
29. G. Efthymoglou, T. Piboongunon and V.A. Aalo, “Error rates of M-ary signals with Multichannel reception in Nakagami-m fading channels”, *EEE Communications Letters*, vol. 10, no.2, pp.100-102, February 2006.
28. G. Efthymoglou, T. Piboongunon and V.A. Aalo, “Performance of DS-CDMA receivers with MRC in Nakagami-m fading channels with arbitrary fading parameters”, *IEEE Transactions on Vehicular Technology*, vol.55, no.1, pp.101-114, January 2006.
27. V. A. Aalo, Piboongunon, T and G. Efthymoglou, “Another look at the performance of

- MRC schemes in Nakagami-m fading channels with arbitrary parameters”, *IEEE Transactions on Communications*, vol. 53, no. 12, pp. 2002-2005, December 2005.
26. T. Piboongunon, V.A. Aalo, C.-D. Iskander, and G.P. Efthymoglou, “Bivariate Generalized Gamma Distribution with Arbitrary Fading Parameters”, *Electronics Letters*, vol.41, no.12, pp.709-710, 9 June 2005.
 25. Aalo, V. A., Piboongunon, T., and Iskander, C., “Bit-Error Rate of Binary Digital Modulation Schemes in Generalized Gamma Fading Channels”, *IEEE Communications Letters*, vol. 9, no.2, pp. 139-141, February 2005.
 24. Piboongunon, T. and Aalo, V. A., “Outage Probability of L-branch Selection Combining in Correlated Lognormal Fading Channel”, *Electronics Letters*, vol.40, No.14, pp.886-888, July 2004.
 23. Chayawan, C. and Aalo, V., "Average Error Probability of Digital Cellular Radio Systems Using MRC Diversity in the Presence of Multiple Interferers", *IEEE Transactions on Wireless Communications*, vol. 2, no. 5, September 2003.
 22. Chayawan, C. and Aalo, V., "On the Performance of Optimum Combining and Maximal Ratio Combining Schemes in a Rice Fading Channel with Cochannel Interference", *IEEE Transactions on Communications*, vol. 50, No. 4, pp. 532-535, April 2002.
 21. Zhang, J. and Aalo, V., “Performance Analysis of a Multicell DS-CDMA System with Base Station Diversity”, *IEE Proceedings Communications*, vol.148, No.2, pp.112-118, April 2001.
 20. Aalo, V. and Zhang, J., “Performance Analysis of Maximal Ratio Combining in the Presence of Multiple Equal-Power Cochannel Interferers in a Nakagami Fading Channel”, *IEEE Transactions on Vehicular Technology*, vol. 50, pp. 497-503, March 2001.
 19. Zhang, J. and Aalo, V., “Effect of Macrodiversity on Average Error Probabilities in a Rician Fading Channel with Correlated Lognormal Shadowing”, *IEEE Transactions on Communications*, vol. 49, no. 1, pp.14-18, January 2001.
 18. Efthymoglou, G. and Aalo, V., “Path Diversity Performance of a DS-CDMA Based Land-Mobile Satellite System in a Shadowed Rician Fading Channel with Power Control Error”, *IEEE Transactions on Vehicular Technology*, vol. 49, no.6, pp. 2051-2059, November 2000.
 17. Aalo, V and C. Chayawan, "Outage Probability of Maximal Ratio Combining with Multiple Cochannel Interferers in Rayleigh Fading", *Electronics Letters*, vol. 36, pp. 1314-1315, July 2000.
 16. Aalo, V and J. Zhang, "Performance of Antenna Array Systems with Optimum Combining in a Rayleigh Fading Environment", *IEEE Communications Letters*, vol. 4, no.4, April 2000.

15. Aalo, V. and J. Zhang, "On the Effect of Cochannel Interference on Average Error Rates in Nakagami Fading Channels", *IEEE Communications Letters*, vol. 3, No.5, May 1999.
14. Zhang, J. and V. Aalo, "The Effect of Branch Correlation on a Macrodiversity Systems in a Shadowed Rician Fading Channel", *Electronics Letters*, vol.34, No.1, pp.18-20, January 1998.
13. Aalo, V., O. Ugweje and R. Sudhakar, "Performance Analysis of a DS/CDMA System with Noncoherent M-ary Orthogonal Modulation in Nakagami Fading", *IEEE Transactions Vehicular Technology*, Vol. 47, No. 1, pp. 20-29, February 1998.
12. Efthymoglou, G., V. Aalo and H. Helmken, "Performance Analysis of Noncoherent Binary DS/CDMA Systems in a Nakagami Fading Channel with Arbitrary Parameters", *IEE Proceedings Communications*, Vol. 144, No. 3, pp. 166-172, June 1997.
11. G. Efthymoglou, V. Aalo and H. Helmken, "Performance Analysis of Coherent DS/CDMA Systems in a Nakagami Fading Channel with Arbitrary Parameters", *IEEE Transaction Vehicular Technology*, Vol. 46, No. 2, May 1997.
10. V. Aalo and S. Pattaramalai, "Average Error Rate of Coherent MPSK Signals in Nakagami Fading Channels", *Electronics Letters*, Vol. 32, pp. 1538-1539, August 1996.
9. P. S. Neelakanta, S. Abusalah, R. Sudhakar, D. DeGroff, V. Aalo, and J. Park, "Dynamic Properties of Neural Learning in the Information-Theoretic Plane", *Complex Systems: The Journal of Science of Complexity*, Vol. 9, pp. 349-374, 1995.
8. G. Efthymoglou and V. Aalo, "Performance of RAKE Receivers in a Nakagami Fading Channel with Arbitrary Fading Parameters", *Electronics Letters*, Vol. 31, No. 18, pp. 1610-1612, August 1995.
7. V. Aalo, "Performance of Maximal-Ratio Diversity System in a Correlated Nakagami Fading Environment", *IEEE Transactions Communications*, Vol. COM-43, pp. 2360-2369, August 1995.
6. V. Aalo and R. Viswanathan, "Multilevel Quantization and Fusion Scheme for the Decentralized Detection of an Unknown Signal", *IEE Proceedings, Pt. F*, pp. 37-44, February 1994.
5. D. DeGroff, P. Neelakanta, R. Sudhakar, and V. Aalo, "Stochastic Aspects of Neuronal Dynamics: Fokker-Planck Approach", *Biological Cybernetics*, Vol. 69, No. 2, pp. 155-164, June 1993.
4. V. Aalo and R. Viswanathan, "Asymptotic Performance of a Distributed Detection System in Correlated Gaussian Noise", *IEEE Transactions on Signal Processing*, Vol. 40, No. 1, pp. 211-213, January 1992.

3. V. Aalo, "Comments on Detector Relative Efficiencies in the Presence of Laplace Noise", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. AES-27, pp. 177-178, January 1991.
2. V. Aalo and R. Viswanathan, "On Distributed Detection with Correlated Sensors: Two Examples", *IEEE Transactions on Aerospace and Electronic Systems*, Vol. AES-25, pp. 415-421, May 1981.
1. R. Viswanathan and V. Aalo, "On Counting Rules in Distributed Detection", *IEEE Transactions on Acoustics, Speech, and Signal Processing*, Vol. ASSP-37, pp. 772-775, May 1989.

Book Chapter

V. Aalo, "Digital Mobile Radio", Encyclopedia of Electrical and Electronics Engineering, John G. Webster, Editor. John Wiley, 1999.

Refereed Conference Proceedings

46. C. Mukasa, **V. A. Aalo** and G. P. Efthymoglou, "Performance Analysis of a Mobile receiver in a Field of Poisson interferers," 2017 38th IEEE Sarnoff Symposium, Newark, Sept. 2017.
45. C. Mukasa, **V. Aalo**, and G. Efthymoglu, "On the performance of dual-hop network with a mobile relay in a Nakagami fading environment", 21st International Workshop on Computer Aided Modeling and Design of Communication Links and Networks (CAMAD 2016), Toronto, Canada, 23-25 October, 2016.
44. C. Mukasa, **V. Aalo**, and G. Efthymoglu, "Exact distributions for aggregate interference in wireless networks with a Poisson field of interferers", 2016 IEEE 12th International Conference on Wireless and Mobile Computing (WiMob 2016), Manhattan, New York, 17-19 October, 2016.
43. K. Peppas, and G. Efthymoglou, and **V. Aalo**, "Exact and asymptotic analysis of dual-hop AF systems in Nakagami-m fading with Rayleigh interferers", 2016 European Conference on Networks and Communications (EuCNC), Athens, Greece, 27-30 June, 2016.
42. G. Efthymoglu, C. Mukasa, and **V. Aalo**, "User Association to Small Cells in the presence of Nakagami Fading and CoChannel Interference", 23rd International Conference on Telecommunications (ICT 2016), Thessaloniki, Greece, May 16-18, 2016.
41. **V. Aalo**, K. Peppas, and G. Efthymoglou, "Performance study of multihop transmission schemes in a binomial interference field", IEEE 82nd Veh. Tech. Conference, Boston, MA, 6-9 Sept, 2015.

40. **V. Aalo**, "Probability distribution of aggregate impulsive interference in wireless sensor networks. (WSN)", 2nd Symposium on Wireless Sensor and Cellular Networks (WSCN), Jeddah, Saudi Arabia, December 2013.
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39. **V. A. Aalo**, K. P. Peppas, G. Efthymoglou, M. Alwakeel, and S. Alwakeel, "Performance of CA-CFAR receivers in alpha-stable clutter", IEEE International Symposium on Signal Processing and Information Technology (ISSPIT), Athens, Greece, December 12-15, 2013.
38. **V. A. Aalo**, K. P. Peppas, G. Efthymoglou, M. Alwakeel, and S. Alwakeel, "Performance analysis of multi-hop AF relaying systems with a Poisson field of interferers in Nakagami- m fading channels", IEEE Vehicular Technology Conference (VTC), Las Vegas, Nevada, September 2-5, 2013.
37. B. Sharma, P. S. Neelakanta, **V. Aalo**, D. F. DeGroff, "Indoor FR channel characterization of nano- through femto-cell ambient at millimeter wave/THz frequencies in LTE contexts", IEEE International Conference on Recent Trends in Information Technology (ICRTIT), 2013.
36. K. P. Peppas, G. Efthymoglou, **V. A. Aalo**, M. Alwakeel, and S. Alwakeel, "On the performance analysis of energy detection of unknown signals in gamma shadowed Ricean fading environments", International Conference on Personal, Indoor and Radio Communications (PIMRC), London, England, September 9-12, 2013.
35. T. Soithong, **V. Aalo**, G. Efthymoglou, and S. Alwakeel, "Effect of interference on multihop amplify-and-forward relay systems operating in Rayleigh fading, Proceedings of IEEE International Conference on Personal, Indoor and Radio Communications (PIMRC), Sydney, Australia, July 4-9, 2012.
34. T. Soithong, **V. Aalo**, G. Efthymoglou, and C. Chayawan, "Performance of Multihop Relay Systems with Co-Channel Interference. ", Proceedings of IEEE Globecom, Houston, TX, pp. 1-6, 26-30, December 2011.
33. **V. A. Aalo** and G. P. Efthymoglou, "Evaluation of Call Dropping Probability for a Heterogeneous Wireless Network with Uniformly Distributed Handoff Failure Rates" Proceedings of IEEE Globecom, Miami, FL, pp. 2634-2638, 26-30 December 2010.
32. **V. A. Aalo** and G. P. Efthymoglou, "Average Error Rate of a Two-Hop Amplify-and-Forward Relay Scheme in Composite Fading Channels". Proceedings of the International Conference on VLSI & Communication Systems (ICVLSICOM-10). Chennai, India, 8-10 January 2010.
31. **V. A. Aalo** and G. P. Efthymoglou, "Decision Fusion Schemes for Wireless Sensor Networks Operating in a Nakagami- m Fading Channel", Proceedings of IEEE International Symposium on Personal, Indoor and Mobile Radio Communication (PIMRC), Tokyo, Japan, September 13-16, 2009.

30. **V. A. Aalo** and G. P. Efthymoglou, "On the MGF and BER of Linear Diversity Schemes in Nakagami Fading Channels with Arbitrary Parameters". Proceedings IEEE Vehicular Technology Conference, Barcelona, Spain, 26-29 April, 2009
29. **V. A. Aalo** and G. P. Efthymoglou, "Call Completion Probability with Generalized Call Holding Time and Cell Dwell Time Distributions". Proceedings IEEE Vehicular Technology Conference, Barcelona, Spain, 26-29 April, 2009
28. **V. A. Aalo** and G. P. Efthymoglou, "Performance Analysis of Generalized Handover Model for Cellular Networks". Proceedings IEEE Sarnoff Symposium, Princeton, NJ, March 30, 31, & April 1, 2009
27. S. Pattaramalai, **V. A. Aalo**, and G. P. Efthymoglou, "Call completion probability with Weibull distributed call holding time and cell dwell time", Proceedings of IEEE Globecom, Washington, DC, pp. 2634-2638, 26-30 November 2007
26. N. Bissias, G. P. Efthymoglou, and **V. A. Aalo**, "Outage capacity of OSTBCs over Nakagami- m fading channels", Proceedings of 18th International Symposium on Personal, Indoor and Mobile Radio Communication (PIMRC), Athens, Greece, pp. 1-5, 3-7 September 2007.
25. **V. Aalo** and T. Piboongunon, "On the multivariate generalized gamma distribution with exponential correlation", Proceedings of IEEE Globecom, St. Louis, MO, pp. 1229-1233, 28 November – 2 December, 2005
24. G. Efthymoglou, **V. Aalo**, and T. Piboongunon, "BER Performance of DS-CDMA MIMO Receivers in Nakagami Fading Multipath Channels with Nonidentical Fading Parameters", Proceedings of 11th European Wireless Conference, Nicosia, Cyprus, April 10-13, 2005.
23. **V. Aalo**, T. Piboongunon, and G. Efthymoglou, "Average Error Rates for Equal Gain Combining Schemes in Nakagami Fading Channels with Arbitrary Fading Parameters", Proceedings of 11th European Wireless Conference, Nicosia, Cyprus, April 10-13, 2005.
22. T. Piboongunon, **V. Aalo**, C. Iskander, and G. Efthymoglou, "Average Error Rate of Diversity Reception Schemes Over Generalized gamma fading Channels, Proceedings of IEEE Southeastcon, Miami, Florida, April 8-10, 2005.
21. **V. A. Aalo** and C. Chawayan, "An Analytical Model for Multipath Fading in Wireless Communications", Proceedings of IEEE International Symposium on Advances in Wireless Communications, Victoria, BC, Canada, September 23-24, 2002.
20. C. Chawayan and **V. A. Aalo**, "Performance Study of MRC Systems with Multiple Cochannel Interferers in a Non-Gaussian Multipath Fading Environment", Proceedings of IEEE 56th Vehicular Technology Conference, Vancouver Canada, September 24-28, 2002.
19. Chawayan and **V. Aalo**, "Outage Probability of Optimum Combining and MRC in a Rice

- Fading Channel with Cochannel Interference”, Proceedings of IEEE Wireless Communications and Networking Conference (WCNC 2000), Chicago, IL 23-28 September 2000.
18. **V. Aalo**, and J. Zhang, “Average Error Probability of Optimum Combining with a Co-channel Interferer in Nakagami Fading”, Proceedings of IEEE Wireless Communications and Networking Conference (WCNC 2000), Chicago, IL 23-28 September 2000.
 17. **V. Aalo**, and J. Zhang, “Performance of Maximal Ratio Combining Diversity in a Nakagami Fading Channel with Cochannel Interference”, Proceedings of IEEE Wireless Communications and Networking Conference (WCNC 99), New Orleans, LA, 21-24 September 1999.
 16. V. Aalo and J. Zhang, “Effect of Co-channel Interference on Bit Error Rates in a Nakagami Fading Channel”, Proceedings of 1999 Conference on Information Sciences and Systems, the Johns Hopkins University, Baltimore, Maryland, March 17-20, 1999
 15. V. Aalo, J. Zhang, and G. Efthymoglou, “Effect of Nakagami Fading and Branch Correlation on a Macrodiversity Cellular System”, Proceedings of Wireless 98 Conference, Calgary, Canada, pp.448-459, July 1998.
 14. G. Efthymoglou, J. Zhang, and V. Aalo, “Performance Analysis of Coherent and Differential PSK with Micro- and Macrodiversity in a Nakagami Fading Channel with Correlated Lognormal Shadowing”, Proceedings of International Conference on Telecommunications (ICT), Porto Carras, Greece, pp. 445-449, June 1998.
 13. O. Ugweje, L. Vann, and V. Aalo, “Maximal Ratio-Selection Diversity Combining of DS-CDMA Systems in Rayleigh Fading”, Proceedings of MILCOM, Monterey, CA, November 1997.
 12. O. Ugweje and V. Aalo, “Performance of Selection Diversity Systems in Correlated Nakagami Fading”, Proceedings of Vehicular Technology Conference (VTC), Phoenix, AZ, May 1997.
 11. G. Efthymoglou, V. Aalo and H. Helmken, “Performance Analysis of Noncoherent Binary DS-CDMA Systems in Nakagami Fading Channel with Arbitrary Parameters”, Proceedings of GLOBECOM, London, England, pp. 1296-1300, November 1996.
 10. V. Aalo, G. Efthymoglou and H. Helmken, “Path Diversity Performance of a DS-CDMA Land-Mobile Satellite System in a Shadowed Rician-fading Channel”, Proceedings of Wireless 96 Conference, Calgary, Canada.
 9. V. Aalo and J. Jiao, “Matched Filter Bound for Frequency Selective Nakagami Fading Channel”, Proceedings of Conference on Information Sciences and Systems, Princeton, NJ, March 1996.

8. R. Sannegowda and V. Aalo, "Performance of Partial Decision Combining Diversity Schemes in Nakagami Fading", Proceedings of Conference on Information Sciences and Systems, Princeton, NJ, March 1994, pp. 474-478.
7. K. Karimi, V. Aalo, and H. Helmken, "A Study of Satellite Channel Utilization in the Presence of Rain Attenuation in Florida", IEEE Southeastcon, 1994, pp. 196-200.
6. R. Sannegowda and V. Aalo, "Performance of Selection Diversity Systems in a Nakagami Fading Environment", IEEE Southeastcon, 1994, pp. 190-195.
5. V. Aalo and R. Viswanathan, "Multilevel Quantization and Fusion Scheme for the Decentralized Detection of an Unknown Signal", Proceedings of 1991 Conference on Information Sciences and Systems, The Johns Hopkins University, Baltimore, Maryland, March 1991, pp. 299-304.
4. V. Aalo and R. Viswanathan, "A Suboptimal Detection Scheme for Binary Signaling", Proceedings of 1990 Conference on information Sciences and Systems, The Johns Hopkins University, Baltimore, Maryland, March 1990, pp. 476-480.
3. V. Aalo and R. Viswanathan, "Asymptotic Performance of a Distributed Detection System in Correlated Gaussian Noise", Proceedings of 1990 Conference on Information Sciences and Systems, Princeton University, Princeton, New Jersey, March 1990, pp. 299-304.
2. V. Aalo, R. Viswanathan and S. C. A. Thomopoulos, "A Study of Distributed Detection in Correlated Sensor Noise", Proceedings of Globecom, Japan, November 1987, pp. 7.7.1-7.7.4.
1. V. Aalo, R. Viswanathan and S. C. A. Thomopoulos, "Distributed Detection with Correlated Sensors", Proceedings of the 25th Allerton Conference on Communications, Control and Computing, University of Illinois, Urbana, Illinois, October 1987, pp- 155-162.

Sponsored Research

Design and Evaluation of Wireless Networks Protocols \$100,000

PI: Imad Mahgoub, Co-PIs: **V. Aalo**, M. Cardei, I. Cardei, and X. Wang

FAU Foundation/Tecore Networks , January 2012 – December 2012

Efficient Protocols and Algorithms for Wireless Networks \$100,000

PI: Imad Mahgoub, Co-PIs: **V. Aalo**, M. Cardei, I. Cardei, and X. Wang

FAU NSF/IUCRC , February 2012 – January 2013

PI: Imad Mahgoub, Co-PIs: **V. Aalo**, M. Cardei, I. Cardei, and X. Wang

Equipment Grant: "MSC -Mobile Switching Center, GSN-GPRS Support Node, GSM Base Station (1900 MHz) and OMCR, CDMA Base Station (850 MHz) and BSM Server", \$965,000 FAU NSF/IUCRC, January 2012 – December 2014

V. Aalo, Performance Study of Blind Source Separation Algorithms, \$25,000

Harris Corporation, May 1 – September 1, 2002

V. Aalo, International Travel Grant, \$1,000
FAU Graduate Studies and Research, July 1998

V. Aalo, Performance Analysis of an ATM Satellite System, \$25,000
Air Force Office of Scientific Research, 1996

V. Aalo, Performance Study of an ATM/Satellite Network, \$25,000
Air Force Office of Scientific Research, 1995

V. Aalo, Model for Signal Degradation in Land Mobile Satellite Systems
FAU Foundation, January-April, 1994, \$1,000.

PROFESSIONAL ACTIVITIES

1. Member of International Editorial Board (2010-Present)
ISRN Communications and Networking
2. **Associate Editor** for Diversity and Fading Channel Theory (2000-2011)
IEEE Transactions on Communications.
3. Member of Technical Committee for Telecommunications (2002-2005)
International Association of Science and Technology for Development (IASTED)
4. **NSF Panel Reviewer**
Wireless Communications Panel (February 21-22, 2002)
Communications Research Program, National Science Foundation
5. **Member, Technical Program Committee**
Wireless Communications and Networking Conference (WCNC 2000)
8th IEEE International Conference on Communication Systems (ICCS 2002)
Global Telecommunications Conference (Globecom 2005)
International Communications Conference (ICC 2006)
Global Telecommunications Conference (Globecom 2007)
Wireless Communications and Networking Conference (WCNC 2007)
Vehicular Technology Conference (VTC 2009)
6. **Reviewer for Scholarly Journals:**
Signal Processing (Elsevier)
IEEE Communications Letters
IEEE Transactions on Vehicular Technology
IEEE Transactions on Aerospace and Electronic Systems,
IEEE Transactions on Communications
IEEE Transactions on Signal Processing

IEEE Transactions on Information Theory
IEEE Journal on Wireless Communications
IET Radar, Sonar and Navigation (UK)
IET Communications (UK)
Electronics Letters (UK)
ETRI Journal (Republic of Korea)

UNIVERSITY SERVICE

University Committees

1. Member, Promotion & Tenure Committee (2014-2016)
2. FAU Faculty Senate (1996)
3. Member, Library Committee (1995-1997)
4. Member, Academic Freedom and Due Process Committee (1992-1994)

College of Engineering Committees

1. Member, College Sustained Performance Evaluation Committee
2. Member, College Graduate Program Committee (2017 – present)
3. Chair, Personnel Committee (2014 - 2016)
4. Member, Search Committee, OME Department (Spring 2013)
5. Member (Secretary), College Policy and Development Committee (2005 – 2009)
6. Member, College Personnel Committee (Spring 2008)
3. Member, College Equity Committee (Fall 2004)
4. Member, College Library Committee (2000- present)
5. Member, College Library Committee (1995-1998)
6. Member, College FEEDS Committee (1994-1996)
7. Member, College, High School and Community College Committee (1992-1994)

Departmental Committees

Chair, Instructor Search Committee (Spring 2017)
Member, CEECS TA Allocation Committee (2013 - present)
Member, Search Committee (Spring 2014)
Member, Graduate Program Committee (2014-Preent)
Member, EE Undergraduate Program Committee(2014-Present)
Chair, CEECS Laboratory/Equipment Committee (2011-2013)
Member, CEECS Personnel Committee (2010-2013)
Member, CEECS Research Committee (2009-2012)
Member, ABET Review Committee (2008)
Member Resource Committee (2007-2009)
Chair, Resource Committee (2004 – 2005)
Member, Resource Committee (2003 – 2004)
Chair, Faculty Search Committee (2002-2003)
Member, Personnel Committee (2001-2002)
Member, Resource Committee (2000-2001)

Member, Academic Affairs Committee (2000-2001)
Department Library Liaison (1996-present)
Member, Personnel Committee (1996-1998)
Member, Graduate Admissions and Petitions Committee (1995-1996)
Member, Faculty Search Committee (1994-1995)
Member, ABET Review Committee (1994-1995)
Member, Resource Committee (1993-1994)
Member, Minority Students Committee (1991-1993)
Member, Scholarship Committee (1992)