

CURRICULUM VITAE



Dr. Pooria Varahram

Jabatan Kejuruteraan, Department of Computer & Communication systems,
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Education

1. PhD, Wireless Communication Engineering, 2010, Universiti Putra Malaysia
2. M.S. Telecommunication Engineering, 2005, Tarbiat Modares University, Tehran, Iran
3. B. S. Electrical Engineering, 2002, Khajeh Nasir University, Tehran, Iran

Areas of Interest

1. Wireless Communication, Power Amplifier Linearization< OFDM Systems

Professional Qualification/ Membership/ Affiliation

1. Member, *International Association of Engineers (IAENG)*
2. Member, Institute of Electrical and Electronics Engineers (IEEE)
3. Member of Institute of Electronics, Information and Communication Engineers (IEICE)

Appointments

Position	Duration
1. Senior Lecturer, Faculty of Engineering, UPM	January 2013 to date
2. Senior Lecturer, Asia Pacific University, TPM, Malaysia	July 2012. December 2012
3. Postdoctoral Researcher, UPM	June 2010. June 2012

Publications

Journals (30 recent journals)

1. Pooria Varahram, Wisam F. Al-Azzo, Borhanuddin Mohd Ali, A Low Complexity Partial Transmit Sequence Scheme by Use of Dummy Signals for PAPR Reduction in OFDM Systems, *IEEE Transaction on Consumer Electronics*, vol. 56, No. 4, pp. 2416-2420, Nov, 2010. (IF=0.94)
2. Hussein, Y.S., Ali, B.M.,Varahram, P., Sali, A. Enhanced handover mechanism in long term evolution (LTE) networks, *Scientific Research and Essays*, 6 (24), pp. 5138-5152, 2011. (IF=0.445)
3. . M. S. Almsheiqi, B. M Ali, M. F. A. Rasid, A Ismail and P. Varahram Self-decision route selection for energy balancing in wireless sensor networks, *International Journal of the Physical Sciences* Vol. 6(36), pp. 8105 . 8114, 30 December, 2011. (IF=0.54)
4. Pooria Varahram, Borhanuddin Mohd Ali, Low complexity partial transmit sequence with complex gain memory predistortion in OFDM systems, *Wireless Personal Communications*, DOI:10.1007/s11277-012-0532-7, 2013. (IF=0.5)
5. Pooria Varahram, Borhanuddin Mohd Ali, Peak-to-average power ratio reduction and digital predistortion effects in power amplifiers in OFDM system, Article in Press, *International Journal of Communication Systems*, Wiley, 2011 (IF=0.225).
6. Pooria Varahram, Somayeh Mohammady, Mohd Nizar Hamidon, Roslina Mohd Sidek, Sabira Khatun. Digital Predistortion Technique for Compensating Memory Effects of Power Amplifiers in Wideband Applications, *Journal of ELECTRICAL ENGINEERING*, VOL. 60, NO. 3, 2009. (IF=0.175)
7. Pooria Varahram, Somayeh Mohammady, Mohd Nizar Hamidon, Roslina Mohd Sidek, Sabira Khatun, Digital predistortion technique for compensating memory effects of power amplifiers in wideband applications, *International Arab Journal of Information Technology (IAJIT)*, vol. 7, no. 3, pp.333-341, 2009. (ISI, Scopus)
8. Pooria Varahram, Borhanuddin Mohd Ali, Analyzing the Effects of Peak to Average Power Ratio

- and Digital Predistortion in OFDM Systems, *Scientific Research and Essays*, 6 (10), pp. 2195-2200, 2011. (IF=0.445)
9. Pooria Varahram, Somayeh Mohammady, Mohd Nizar Hamidon, Roslina Mohd Sidek, Sabira Khatun, "An Improvement Method for Reducing Power Amplifiers Memory Effects Based on Complex Gain Predistortion", *Australian Journal of Basic Applied Science (AJBAS)*, vol. 4, no. 7, pp. 2059-2067, 2010. (Scopus)
 10. Varahram, P., Ali, B.M., Mohammady, S., Sulaiman, N. Power amplifier linearisation scheme to mitigate superfluous radiations and suppress adjacent channel interference, *IET Communication*, 2014. (IF=0.5)
 11. Pooria Varahram, Borhanuddin Mohd Ali, Partial Transmit Sequence Scheme with New Phase Sequence for PAPR Reduction in OFDM Systems, *IEEE Transaction on Consumer Electronics*, vol. 57, no. 2, May 2011.(IF=1.035).

Conference Proceedings (30 recent Conference Proceedings)

1. Pooria Varahram, Borhanuddin Mohd Ali, Wisam Al-Azzo, Low Complexity Partial Transmit Sequence for PAPR Reduction in OFDM Systems, *ICACT*, Korea, 2011. (Scopus)
2. Yaseein Soubhi Hussein¹, Borhanuddin Mohd Ali^{1,2}, Pooria Varahram¹, On Fractional and Semi-Soft Handover in Long Term Evolution(LTE) Networks, *Asia Pacific Conference on Communication (APCC)*, Oct., 2011.
3. Pooria Varahram, B. M. Ali, FPGA Implementation of Novel Peak-to-Average Power Ratio Reduction in Orthogonal Frequency Division Multiplexing Systems, *Asia Pacific Conference on Communication (APCC)*, Oct., 2011.
4. Mohammady, S.; Sidek, R.M.; Varahram, P.; Hamidon, M.N.; Sulaiman, N.; A new DSI-SLM method for PAPR reduction in OFDM systems, *Consumer Electronics (ICCE), 2011 IEEE International Conference on*, 2011. (Scopus)
5. Mohammady, S.; Sidek, R.M.; Varahram, P.; Hamidon, M.N.; Sulaiman, N.; Study of PAPR reduction methods in OFDM systems, *Advanced Communication Technology (ICACT), 2011 13th International Conference on*, 2011. (Scopus)
6. Pooria Varahram, S.S. Jamuar Somayeh Mohammady, Mohd Nizar Hamidon, Sabira Khatun, "Power amplifiers linearization based on digital predistortion with memory effects used in CDMA applications", *European Conference on Circuit Theory and Design, ECCTD*, no. 4529639, pp. 488-491, 2007. (Scopus)
7. Varahram, P.; Atlasbaf, Z.; Power Amplifiers Linearization Based on Gain Predistortion Used in Third Generation Systems+*ICEE2006*, June 2006. (Scopus)
8. Heydarian, N.V., Oskouei, H.D., Forooghi, K., Varahram, P. New neural modeling of miniature X-band branch-line coupler, *Asia-Pacific Conference on Applied Electromagnetics, APACE 2005*, Proceedings, no. 1607820, pp. 257-259, 2005. (Scopus)
9. Varahram, P., Atlasbaf, Z., Heydarian, N.V. Adaptive digital predistortion for power amplifiers used in CDMA applications, *Asia-Pacific Conference on Applied Electromagnetics, APACE 2005* Proceedings, no. 1607810, pp. 215-218, 2005.

Books (If any)

1. Pooria Varahram, *Power Amplifier Linearization in Wireless Communication Systems: Maximize Power Efficiency, System Cost Reduction, Prolong Battery Life*, Lambert Academic Publishing, 2011.
2. Pooria Varahram, Somayeh Mohammady, Borhanuddin Mohd Ali, Nasri Sulaiman, *Power Efficiency in Broadband Wireless Communication Systems*, CRC Press, 2014. (Under Edition)

Chapter in Books (If any)

1. Pooria Varahram, Somayeh Mohammady, Mohd Nizar Hamidon, Roslina Mohd Sidek, Sabira Khatun, "DEMONSTRATION OF A POWER AMPLIFIER LINEARIZATION BASED ON DIGITAL PREDISTORTION IN MOBILE WIMAX APPLICATION", Book chapter "*Microwave and Millimeter Wave Technologies*", ISBN 978-953-7619-X-X., 2010.
2. Pooria Varahram, Borhanuddin Mohd Ali, A Review of Peak to Average Power Ratio Reduction Techniques in Orthogonal Frequency Division Multiplexing Systems, Accepted, In-Tech Publisher, WIMAX, 2011.



Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	A Complex Memory Gain Convergence Scheme to Model Nonlinear Systems with Memory Effects	76,000	2013-2015	FRGS
2.	Design and Development of a Low Complexity Linearization Scheme to Conserve Power Consumption in Broadband MIMO-OFDM Communication Systems	43,000	2013-2015	Putra Grant
3.	A Robust Digital Predistortion Scheme with Analog Imperfections Compensator in Wireless Communication Systems	66,000	2012-2014	ERGS

Awards/Recognition (Current)

Num	Name of awards	Title	Award Authority	Award Type	Year
1.	Gold Medal	Concatenated Multi Dimensional Modulating Transmitter and Receiver for Digital Communication Systems	PRPI Exhibition	National	2010
2.	Silver Medal	A low complexity broadband wireless transmission system with enhanced channel performance, using hierarchical concatenation of decreasing modulation orders	MTE	National	2011

Professional Services/Consultation

No	Year	Title	Authority	Amount
1.	2013-2016	Setting up of VLBI stations in Malaysia	UPM and UM	-

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status



MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Faraz Talebpour (GS38239)	A Robust Digital Predistortion Scheme with Analog Imperfections	Ongoing
2.	Amir Mohammady (GS37444)	Mobility Management in 6LOWPAN network	Ongoing
3.	<u>CHOO HONG NING</u> (GS34166)	DSP Implementation of adaptive digital predistortion	Ongoing
4.	<u>DINAAGAREN A/L SELVADURAI</u> (GS39563)	A Complex Gain Memory Predistoriton	Ongoing

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
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