

Biography

Gaguk Zakaria received his Stratum One (Bachelor of Science) degree in Electrical Engineering in 1985 from Bandung Institute of Technology, Bandung, Indonesia, and his Master of Science degree in Electrical Engineering in 1993 from Virginia Tech, where he recently successfully completed the pursuit of his doctoral degree in Electrical Engineering. In 1993, he was a Graduate Research Assistant in the DSP Research Laboratory at Virginia Tech. Since 1995, he is at Hughes Network Systems, Germantown, Maryland, where he has been working mainly in R&D, specifically evaluations of speech coding and applications of channel coding to speech coding. His research interests are primarily in the area of Digital Signal Processing and its applications. His research at the DSPRL, under the supervision of Dr. A. A. (Louis) Beex, and at Hughes Network Systems has resulted in the publications below. Upon graduation he will continue his work at Hughes Network Systems as a Member of Technical Staff.

- [1] A. A. (Louis) Beex and G. Zakaria, *Direct Computation of Line Spectral Frequency Using Cascade Recursive Least Squares with Subsection Adaptation*, Proceedings of the 33rd Annual Asilomar Conference on Signals, Systems, and Computers, TA.7-6, Pacific Grove, CA, March 24-27, 1999.
- [2] U. Bhaskar, K. Swaminathan, S. Nandkumar, and G. Zakaria, *Quantization of SEW and REW components for 3.6 kbit/s Coding Based on PWI*, IEEE Workshop on Speech Coding, pp. 99-100, Haikko Manor, Porvo , Finland, June 1999.

- [3] K. Swaminathan, S. Nandkumar, U. Bhaskar, N. Kowalski, S. Patel, G. Zakaria, J. Li, V. Prasad, *A Robust Low Rate Coder for Wireless Communications*, 1997 IEEE Workshop on Speech Coding, pp. 75-76, Philadelphia, September 1997.
- [4] G. Zakaria and A. A. (Louis) Beex, *Relative Convergence of the Cascade RLS with Subsection Adaptation*, Proceedings of the 33rd Annual Asilomar Conference on Signals, Systems, and Computers, TA.7-6, Pacific Grove, CA, March 24-27, 1999.
- [5] G. Zakaria and A. A. (Louis) Beex, *Cascade Recursive Least Squares with Subsection Adaptation for AR Parameter Estimation*, ICASSP '98, pp. II.953-II.956, Seattle, Washington, May 1998.
- [6] G. Zakaria and A. A. (Louis) Beex, *MSE Analysis of the LMS Algorithm with Reduced-Order Technique*, ICSPAT 1997, pp. 94-97, San Diego, September 1997.
- [7] G. Zakaria and A. A. (Louis) Beex, *Switching Adaptive Filter Structures for Improved Performance*, 26th Southeastern Symposium on System Theory, Athens, Ohio, pp. 442-446, March 1994.
- [8] G. Zakaria and A. A. (Louis) Beex, *Using DFT and Interpolation to Reconstruct Narrowband Signals Buried in Noise*, 26th Southeastern Symposium on System Theory, Athens, Ohio, pp. 437-441, March 1994.