

# ***Résumé***

## **Personal**

*First name:* Reza

*Last name:* Dianat

*Date of birth:* 6/3/1975

*Marital status:* Married

## **Education**

*B. Sc.:* 1997/ Sharif University of Technology/ Telecommunication Engineering,

- Average: 16.77 out of 20

*M. Sc.:* 1999 / Sharif University of Technology/ Telecommunication Systems Engineering,

- Average: 17.88 out of 20
- Supervisor: Dr. Ma'asoumeh Nasiri Kenari
- Thesis: Design and implementation of ISB (Independent Side-Band) modulator and demodulator using DSP for Power Line Carrier (PLC)

*Ph.D.:* 2005/ Sharif University of Technology/ Telecommunication Systems Engineering,

- Average: 18.55 out of 20
- Supervisor: Dr. Farokh A. Marvasti
- Dissertation: Joint Source and Channel coding for digital images and video

## **Publications**

### **Conferences**

1. N. Sadati and R. Dianat, "RBF Digital Equalizer Using Genetic Algorithm Training," in *7<sup>th</sup> Iranian Conference on Electrical Engineering*, Tehran, Iran, 1999.
2. N. Nejati, R. Dianat, P. Azmi and F. Marvasti, "Joint error concealment and channel coding for voice over IP applications," in *IEEE International Symposium on Intelligent Signal Processing and Communication Systems ISPACS2003*, pp. 474-477, Awaji Island, Japan, Dec. 7-10, 2003.
3. F. Marvasti, P. Azmi and R. Dianat, "Nonuniform sampling algorithms, new directions and applications," in *IEEE International Conference on Sampling Theory and Applications SampTA2003*, pp. 54-63, Austria, May 26-30, 2003.
4. A. Rafiee, R. Tavakoli, R. Dianat and S. Abbaspour, "Fire and smoke detection using wavelet analysis and disorder characteristics," in *3rd International Conference on Computer Research and Development ICCRD2011*, pp. 262-265, 2011.
5. A. Masoomi, H. Dehghani and R. Dianat, "Speckle Reduction Based on Directional Smoothing of Wavelet Coefficients and De-blurring," in *5th International Conference: Sciences of Electronic, Technologies of Information and Telecommunications SETIT2009*, Tunisia, March 22-26, 2009.
6. A. Masoomi, H. Dehghani and R. Dianat, "Speckle Reduction of SAR Image based on Bayesian Estimator and De-blurring," in *5th International Conference:*

### **Journals**

1. R. Dianat, F. Marvasti, P. Azmi and S. Talebi, "New vector quantization-based techniques for reducing the effect of channel noise in image transmission," *EURASIP Signal Processing*, Vol. 84, pp. 2153-2163, Nov. 2004.
2. R. Dianat and F. Marvasti, "FFT-based fast Reed-Solomon codes with arbitrary block-lengths and rates," *IEE Proc. Commun.*, Vol. 152, No. 2, pp. 151-156, Apr. 2005.
3. R. Dianat, M. Ghanbari and F. Marvasti, "A low bit-rate hybrid wavelet-DCT video codec," *IEEE Tran. Cir. Syst. Video Tech.*, Vol. 15, No. 7, pp. 935-937, July 2005.
4. R. Dianat, F. Marvasti and M. Ghanbari, "Reliable Video Transmission Using Codes Close to the Channel Capacity," *IEEE Tran. Cir. Syst. Video Tech.*, Vol. 16, No. 12, pp. 1550-1556, Dec. 2006.
5. R. Dianat and F. Marvasti, "Linear Estimation of Stationary Autoregressive Processes," *ISRN Signal Processing*, 2011.
6. R. Hamzehyan, R. Dianat and N. Cheraghi, "New Variable Step-Size Blind Equalization Based on Modified Constant Modulus Algorithm," *International journal of machine learning and computing*, Vol. 2, No. 1, pp. 30-34, Feb. 2012.
7. M. Bazyar, A. Keshavarz and R. Dianat, "Speakers Identification in a Telephone Conversation Using Gaussian Mixture Model," *International Journal of Computer and Communication Engineering*, Vol. 1, No. 2, pp. 96-99, July 2012.

### **Interests**

Reed-Solomon codes, LDPC, Turbo codes, Image compression, Video Compression.