

# Jamal Ramadan Elbergali

Professor of Telecommunications — College of Industrial Technology, Misurata

### A. Personal Details



Date of Birth: 20<sup>th</sup> March 1966 Marital Status: Married

Nationality: Libyan Languages: Arabic, English

Contact: College of Industrial Technology-Misurata

Address: Misurata-Libya

## **B.** Academic Qualifications

Ph.D.: Broadband Communication Networks, Department of Electrical Engineering University of Cape Town, South Africa, 2003. "A FRAMEWORK FOR FAST HANDOFF SCHEMES IN WIRELESS ATM NETWORKS"

M.Sc.: Telecommunications and Information systems, obtained from Aligarh Muslim Univer city, India, 1993.

B.Sc.: Electronic and Computer Engineering from Alfateh University, Tripoli-Libya, 1990.

# **C.** Employment History

March 1990 – March 1991: Assistant Staff Member & Laboratory Engineer — High Industrial Institute.

July 1993 – September 1996: Lecturer — Polytechnic Institute, Misurata-Libya — Misurata, Libya

September 1996 – 1999: Chairman, Department of Electronic and Computer Engineering — Polytechnic Institute, Misurata-Libya — Misurata, Libya

January 2004 – (end date not specified): Head, Electrical and Electronic Engineering Department — University of 7<sup>th</sup> of October

2009 – Present: Professor — Electronic Engineering Department, College of Industrial Technology-Misurata — Misurata, Libya



#### **D.** Research Interests

- Computer Software.
- Mobile Communication.
- Data Transmission.
- Communication Networks.
- Digital Computer Design.

#### E. Selected Publications

- 1. أحمد على البرق سمية على التومي جمال البرقلي "Arithmetic and Logic Unit Design Using VHDL Language", 30 المجلة الدولية للعلوم والتقنية العدد
- 2. Hamza Eldenferia, Jamal Elbergali, "Influence of LMMSE Estimator on V-Blast wireless MIMO system using BPSK Scheme", International Conference on Technical Sciences (ICST2019), 2019.
- Hamza Eldenferia, Jamal Elbergali, "The performance of Space Time Block Coding (STBC) in MIMO relay network", First Conference for Engineering Sciences and Technology (CEST 2018), 2018.
- 4. H.A. Eldenferia, J.R. Elbergali, "Performance Analysis of DTMF Detection using Modified Goertzel Algorithm over AWGN", First Conference of Industrial Technology (CIT2017), 2017.
- Jamal R. Elbergali, "Performance Analysis of a Combined Ordered Successive and Interference Cancellation Using Zero-Forcing Detection over Rayleigh Fading Channels in MIMO Systems", ICECE 2015: 17th International Conference on Electronics and Communication Engineering, South Africa, 2015.
- 6. Jamal R. Elbergali, Neco Ventura, "Performance Analysis of Dynamic Switching between Spatial Multiplexing and Diversity over Rayleigh Fading Channels in MIMO-OFDM Systems using QPSK Modulation Scheme", SATNAC2014, South Africa, 2014.
- Jamal R. Elbergali, "Performance Analysis of Shadowing Effect over Rayleigh Fading Channels in MIMO-OFDM Systems using QPSK Modulation Scheme", SATNAC2013, Stellenbosch, South Africa, 2013.
- 8. Elrowayati, J. Elbergali, "Medical Images Compression using Wavelet Transform and Neural Networks: Assessment of Reconstruction Quality Based on the Structural Information", The Libyan Arab International Conference on Electrical and Electronic Engineering, Tripoli, Libya, 2010.



- J. Elbergali, A. Elrowayati, "Medical Images Compression using Lifting Wavelet and Adaptive Wavelet back propagation Neural Networks", Proceedings of Mosharaka International Conference on Communications, Propagation, and Electronics, Amman, Jordan, 2010.
- 10. J. Elbergali, A. Elrowayati, "Medical Images Compression using Wavelet Lifting Scheme Implementation and Artificial Neural Networks with Adaptive Learning-Rate Parameter", 3rd International Conference on Electrical Engineering and Technology, Sousse, Tunisia, 2009.
- 11. E. Saad, J. Elbergali, M. Ashibani, "Enhancing TCP Performance over Heterogeneous Networks", South African Telecommunications Network & Applications (SATNAC2006), Stellenbosch, South Africa, 2006.
- 12. Elhusain Saad, Jamal Elbergali, Majdi Ashibani, "Enhancing TCP Performance over Wireless Communication Networks", Libyan Arab International Conference on Electrical and Electronic Engineering, Tripoli, Libya, 2006.
- Jamal Elbergali, Neco Ventura, "Performance modeling of an inter-cluster handoff path extension scheme in Wireless ATM networks", SAIEE Transactions, June 2004, vol. 94 No.2, 2004.
- 14. Jamal Elbergali, Neco Ventura, "Performance evaluation of a new fast path re-routing for inter-cluster handoff scheme in wireless ATM networks", IEEE ICCS'02, Singapore, 2002.
- 15. Jamal Elbergali, Neco Ventura, "Performance evaluation of a new fast inter-cluster handoff scheme in Wireless ATM networks", IEEE GLOBECOM'02, Taiwan, 2002.
- 16. Jamal Elbergali, Neco Ventura, "An adaptive route optimization for inter-cluster hand scheme in wireless ATM networks", SATNAC'02, South Africa, 2002.
- 17. Jamal Elbergali, Neco Ventura, "A new inter-cluster handoff technique to support real time applications in Wireless ATM networks", ICWN'02, Las Vegas, USA, 2002.
- 18. Jamal Elbergali, Neco Ventura, "Performance evaluation of an efficient inter-switch handoff scheme for wireless ATM Networks", SATNAC'01, South Africa, 2001.
- 19. Jamal Elbergali, Neco Ventura, "Backward and forward inter-switch handoff scheme for wireless ATM networks", SATCAM'00, South Africa, 2000.
- Majdi Ashibani, J. Elbergali, "Performance of Data transmission using orthogonal groups of QAM", Libyan International Conference on Electrical & Electronic Engineering, Tripoli, Libya, 1995.
- 21. J. Elbergali, Majdi Ashibani, "Performance of Multipath fading on mobile Data transmission systems", Libyan International Conference on Electrical & Electronic Engineering, Tripoli, Libya, 1995.



# F. Skills & Technical Competencies

- FORTRAN, Basic, C, C++, Math lab, Assembly Language. Python.