Dr. Yousef Salem Hwegy

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Personal Data

Position	Professor
Nationality:	Libyan
Marital Status:	Married
Date & Place of Birth:	30/01/1959, Tripoli- Libya
Hobbies:	Reading, Sports.

Educational Qualification

1983-1985 **B.Eng**. Bachelor of Engineering in Electronic and Electrical Engineering at Nottingham university, England.

1985-1986 **M.S.c** Master of applied Science in Electronic and Electrical Engineering at Loughborough university, England.

1991-1994 **Ph.D** in Electronic and   Electrical Engineering at Loughborough university, England.

Abstract of dissertation in Master level

The MS.c dissertation title was "DC to DC converter". The project deals with the design and fabrication of electronic circuit that control a DC input voltage and convert it to a higher level Dc output voltage.

Abstract of Doctoral thesis

The Ph.D. thesis title was "Adaptive equalization of time varying channels" . This thesis is concerned with solving the problem of equalization of digital signals that have been passed through a time varying channel and corrupted by additive white noise. The approach used to deal with this problem is by the use of a robust filter structure rather than a tailored adaptation method.

Professional Experience

Teaching experience 35 Years

1987-1990   A member of Scientific Committee and Teaching Electronic subjects to undergraduate Engineering students at the Engineering Academy- Tajoura.

1990-1994   A member of a research group in digital communication at Loughborough university, England.

1995-2000 Head of the Electronic Engineering department at the Engineering academy Tajoura. Teaching various Electronic courses. Member of scientific committee. Supervised several undergraduate projects.

2000-2019. A member of Scientific committee at Tripoli University/ Computer Engineering Department. Teaching various Electronic courses to undergraduate and postgraduate Computer Engineering Students.

2019-2021 Head of the Computer Engineering Department at Tripoli university . Teaching various Electronic courses. Member of scientific committee. Supervised several undergraduate and postgraduate projects.

2021-2024 . A member of Scientific committee at Tripoli University/ Computer Engineering Department. Teaching various Electronic courses to undergraduate and postgraduate Computer Engineering Students.

Research Interests

- Adaptive filters and its application to channel equalization.
- Adaptive algorithms to counter act the time variation problems of transmission channels.
- Error Correcting code for efficient bandwidth transmission.
- Turbo code and its applications.

Academic Experience & Skills

Taught Courses at undergraduate level:

- Fundamental Of Electrical Engineering circuit plus associated lab.
- Introduction to logic circuits design plus associated lab.
- Analog electronics plus associated lab.
- Power electronics plus associated lab.
- Signals and Systems plus associated lab.
- Digital Signals Processing plus associated lab.
- Digital communication.

Taught Courses at postgraduate level:

- Coding and Information theory
- Advance Engineering Mathematics.

Programming

- Matlab
- Electronic Work Bench
- Fortran
- Pascal

- C language
- Mathematica

Software

- Microsoft office (Word processing, Excel, PowerPoint…etc)
- Internet Skills

Other Activities:

- Supervision of several B.Sc and MS.c projects.

Language Skills

- Arabic   (Mother tongue)
- English (Fluently spoken & written)

Publications

1. **Cowan,C.F.N., and Hwegy,Y.S**(1993) Equalization of highly non stationary data communication channels,5th Banger communication system, England.
2. **Cowan,C.F.N., and Hwegy,Y.S**(1993)Equalization of time variant channels using nonlinear order statistics adaptive filter,Int.conf.on.DSP,Cyprus.
3. **Hwegy,Y.S., and Cowan,C.F.N**(1994)Adaptive equalization of time varying channels,IEE.Proc.Part F.
4. **Hwegy,Y.S., Osman,M,and Alsellami,A**(2007)Reduction of Inter Symbol Interference in An airplane Navigation System, Int.conf.on Aeronautical Science and Air transportation, Tripoli.
5. **Hwegy,Y.S**(2007) Adaptive Noise Cancellation, Int.conf.on Science and Techniques of Automatic control, Tunisia.
6. **Hwegy,Y.S**(2007)Data compression using linear predictive coding, Int.conf.on Communication, Networking and Information Technology, Jordan.
7. **Hwegy,Y.S**(2008) Adaptive Equalization, Int.conf.on Science and Techniques of Automatic control, Tunisia.

8. **Hwegy,Y.S**(2009)Efficient Bandwidth Transmission using Forward Correcting Code,IEEE International Conference on Computer Science and Information Technology. Beijing, China.

9. **Hwegy,Y.S, Jayachandran ,M** (2009) DESIGN OF A STAND ALONE NAVIGATION SYSTEM USING POSITION ESTIMATION ALGORITHM,IEEE International Geosciences and Remote Sensing Symposium, Cape Town, South Africa.

10. **Hwegy,Y.S(2010)**Concatenated block codes, The Second International Conference On Computer and Automation Engineering, Singapore.

11. **Hwegy,Y.S(2010)**Reliable Data Transmission over Rayleigh Channel ,IEEE Internatioal Conference on Software Engineering and Service Sciences, Beijing,China.

12. **Arif ,M.S,Hwegy,Y.S(2010)** Performance Study of Forward Error Correction Codes for long bursty IPTV traffic over Wireless AWGN Channels,the fifth Libyan Arab International Conference on Electrical an Electronic Engineering,Tripoli,Libya.

13. **Hwegy,Y.S(2011)**Coding for reliable data transmission, International Conference on Electronics and Communication Engineering, Dubai, AUE.

14. **Hwegy,Y.S(2012)**Performance of convolutional code with hard and soft decision, International conference on aerospace engineering and information technology, Nanchang,China.

15. **Hwegy,Y.S(2012)**High speed data transmission using coding, International conference on nanomaterials and electronics engineering, Malaysia.

16. **Hwegy,Y.S Saed,A(2013)**Turbo code with respect to random interleaver, International Research Conference on Information Technology and Computer Sciences, Malaysia.

17. **Amira A. Elbibas[1], I, Hwegy,Y.S(2013)** Neuro-Fuzzy Network for Equalization of Different Channel Models, **International Journal of Emerging Technology and Advanced Engineering.**

18. **Amira A. Elbibas[1], I, Hwegy,Y.S(2013)** Performance Evaluation of Channel Equalization for nonlinear Channels using ANFIS Intl. Conf. on Advances in Computer and Information Technology, Malaysia.

19. **Sadek shredi, Abdubaset kareem,Hwegy Y.s(2022)** Performance Evaluation of convolution code using hard and soft decision over hostile channel. Not submitted

20. **Sadek shredi, Abdubaset kareem,Hwegy Y.s** (2022)Performance Evaluation of turbo code using different modulation techniques over noisy channel. Not submitted

21. Nayroz abobaker, faze telag, Hwegy Y.s (2022)Fast data transmission using turbo code over limited bandwidth channel . Not submitted.