

Staff Member C.V



1. PERSONAL INFORMATION

Name: Hussein Hamed Mahmoud Ghouz

Position: Associate Professor in Department of Electronics and Communications, Engineering College, at Arab Academy for Science Technology and Maritime Transport, Cairo, Egypt

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Birth date: 07/21/1959

Nationality: Egyptian

Marital status: married

2. EDUCATION

2.1. PhD:

PhD in the field of: Electrical engineering
Awarded by: Arizona State University (in Dec. 1996)
On:
Analysis and Design of Via and Flip-Chip Interconnects

2.2. M. Sc.

Master of Science degree: Electrical engineering
Awarded by: Military Technical College (in Feb. 1991)

On:

Clutter suppression using Adaptive Array Signal Processing

2.3. B. Sc.

Bachelor of Science degree: Electrical engineering

Awarded by: Military Technical College (in July. 1983)

Specialization: Radar

Graduation Grade (accumulated): Excellent (Distinction and Honors
The highest grade)

3. WORK EXPERIENCE

3.1. Positions Occupied

1. I was an academic member in the Electronic Warfare department, Military Technical College, Cairo, Egypt, from 1985 to 1992.
2. I was a research / Teaching Associate in the department of Electrical Engineering, Arizona State University, USA, from 1992 to 1996.
3. I was an academic member in radar and guidance department, Military Technical College, Cairo, Egypt, from 1996 to 1999.
4. I was a chief of the branch of technical research and development center, West Military Sector, Egyptian armed forces from 1999 to 2000.
5. I was a chief of the branch of technical research and development center, central Military Sector, Egyptian armed forces from 2000 to 2002.
6. From 2002 up December 2009, I was an academic member in the department of Electrical Engineering, Modern Academy for Engineering and technology, Cairo, Egypt.
7. From December 2009 up till now, I am a current academic member in the department of Electronics and communication Engineering, Arab Academy for Science and Technology and Maritime Transport, Cairo, Egypt.

3.2. Major Activities and Experience

I had taught the following group of courses:

G1. Signal and Systems – Signal Theory - Digital Signal Processing – Radar theory and systems – Radar Signal Processing

- G2.** Introduction to computer systems – Design and Analysis of Logic Circuits – Programming Languages (FORTRAN 77 and 99, C++) – Operating Systems – MATLAB
- G3.** Electromagnetic Field Theory - Microwave Circuits and Devices – Antennas: analysis and design - Electromagnetic Waves

4. POST GRADUATE ACTIVITIES

a) Supervisor of the following Master of Science thesis:

1. Adaptive Space-Time Processing for Interference Suppression in Phased Array Radar Systems, M.T.C., Cairo, Egypt 2000.
2. Interference Excision Technique in Frequency Hopping Spread Spectrum Communication, Faculty of Engineering, Cairo University, Cairo, Egypt 2009 (M. Sc.).

b) Supervisor of the following Ph.D. thesis:

1. Generalized Adaptive Space-Time Side-lobe Canceller in Electronic Scan Radar Systems, M.T.C., Cairo, Egypt 2001.
2. Interference Suppression Technique of Filtering in Electronic Scan Phased Array Radar Systems, M.T.C., Cairo, Egypt 2003.

5. LANGUAGES

English: Excellent

6. PUBLICATIONS

6.1. Lecture notes published locally in Modern Academy for Engineering & Technology

1. Digital Signal Processing (3rd year – computer)
2. Electromagnetic Field Theory (3rd year - communication)
3. Antennas and Waves (5TH year – communication Lecture notes. and Laboratory notes)

6.2. Published Papers

- [1] Hussein H. Ghouz and E. B. El-Sharawy, "Finite Time-Domain Analysis of Flip-Chip Interconnects with Staggered Bumps", IEEE Trans. On Microwave Theory and Techniques, volume 44, No. 6, pp. 961-963, June 1996.

- [2] Hussein H. Ghouz and E. B. El-Sharawy, "An Accurate Circuit Model of Flip-Chip Interconnects", Proceeding on IEEE MTT-S International Microwave Symposium, volume 3, pp. 1827-1830, June 1996.
- [3] Hussein H, Ghouz and E. B. El-Sharawy, "An Accurate Circuit Model of Flip-Chip Interconnects", Proceeding on IEEE on Microwave Theory and Techniques, volume 44, No. 12, pp. 2543-2553, Dec. 1996.
- [4] Hussein H. Ghouz," Analysis and Modeling of Resonance Effects in Monolithic Microwave Integrated Circuit Package", Proceeding of the First International Conference on Electrical Engineering ICEENG98, Military Technical College, Cairo, Egypt, 24-26 March 1998.
- [5] Hussein H, Ghouz, Salem I., Hanafy A., and Moufied A. D.," Adaptive Space-Time Side lobe Canceller", Proceeding of the second International Conference on Electrical Engineering ICEENG99, Military Technical College, Cairo, Egypt, 23-25 Nov. 1999, AW-7 pp. 146-147.
- [6] A. M. El-Bakli, M. H. Abd El-Azeem, and Hussein H. Ghouz," Modeling and Analysis of Anisotropic and Non-linear Structures Using 3D-(SCN) TLM", ", Proceeding of the second International Conference on Electrical Engineering ICEENG99, Military Technical College, Cairo, Egypt, 23-25 Nov. 1999, AW-3 pp. 114-118.
- [7] Hussein H. Ghouz, F. I. A. Elghany, and M. M. Qutb," Adaptive Space-Time Processing for Interference Suppression in Phased Array Radar Systems (Part-I: Search Radar)", Proceeding of the Seventeenth National Radio Science Conference, 17th NRSC'2000, Feb., 22-24, 2000, pp. B8-1 – B8-8.
- [8] Hussein H. Ghouz, F. I. A. Elghany, and M. M. Qutb," Adaptive Space-Time Processing for Interference Suppression in Phased Array Radar Systems (Part-II: Tracking Radar)", Proceeding of the Seventeenth National Radio Science Conference, 17th NRSC'2000, Feb., 22-24, 2000, pp. B9-1 – B9-7.
- [9] A. M. Allam, A. Mitkees, Hussein H. Ghouz, and O. Ali," Time-Domain Analysis of Microstrip Line Using FDTD", AL-AZHAR Engineering Sixth International Conference, pp. 293-302, Sept. 1-4, 2000.
- [10] Hussein H, Ghouz, Salem I., Hanafy A., and Moufied A. D.," Two-Dimension Generalized Side lobe Canceller With Partial Adaptivity", Proceeding of the Eighteenth National Radio Science Conference, 18th NRSC'2001, March, 27-29, 2001, B5 pp. 81-87.
- [11] Hussein H. Ghouz, Kamal S. M., Hanafy A., and Salem I. A.," A Novel Adaptive Space-Time Technique of Filtering for Interference Suppression in Phased Array Airborne Radar Systems", Proceeding of the 9th International

- Conference on Aerospace Science and Aviation Technology, ASA'2001, 8-10 May 2001.
- [12] Hussein H. M. Ghouz and E. B. El-Sharawy, " Analysis and modeling of microstrip-to-coplanar flip chip package interconnects", International Journal of RF and Microwave computer-Aided Engineering, volume 11, issue 4, July 2001.
- [13] Hussein H. Ghouz, Kamal S. M., Hanafy A., and Salem I. A., " A Novel Adaptive Space-Time Technique of Filtering for Interference Suppression in Phased Array Radar Systems", Proceeding of the 3rd International Conference on Electrical Engineering ICEENG2002, Military Technical College, Cairo, Egypt, 14-16 May 2002.
- [14] Hussein H. Ghouz, Kamal S. M., Hanafy A., and Salem I. A., " New Partial Adaptive Space-Time Technique of Filtering for interference Suppression in Phased Array Radar Systems, Proceeding of the 10th International Conference on Aerospace Science and Aviation Technology, ASA'2003, 13-15 May 2003.
- [15] Hussein H. Ghouz and E. B. El-Sharawy, " Novel solvent-free labelling procedure with carbon-14 diethyl malonate", Journal of Labelled Compounds and Radiopharmaceuticals, Volume 46 Issue 2151-158, February 2003.
- [16] Hussein H. M. Ghouz and E. B. El-Sharawy, " Analysis and characterization of package resonances", International Journal of RF and Microwave computer-Aided Engineering, volume 15, issue 1, Jan. 2005.
- [17] Hussein H. Ghouz, " Finite-Difference Time-Domain Analysis and Design of High Frequency Interconnects in MMIC Circuit Packages", Ain Shams Journal of Electrical Engineering, ASJEE, Vol. 2, pp. 53-65, December. 2009.
- [18] Hussein H. Ghouz, "Finite-Difference Time-Domain Analysis and Design of Transition Interconnects in Microstrip-to-Microstrip Package", Proceeding of the 7th International Conference on Electrical Engineering ICEENG-7, Military Technical College, Cairo, Egypt, EE-135, 25-27 May, 2010.
- [19] Hussein H. Ghouz, "Finite-Difference Time-Domain Analysis And Design of Coplanar-to-Microstrip Transition Interconnects", Proceeding of the 7th International Conference on Electrical Engineering ICEENG-7, Military Technical College, Cairo, Egypt, EE-137, 25-27 May, 2010.
- [20] Mohammed Abd El-Aziz an Hussein H. M. Ghouz, "Novel Broadband and Dual-Band Patch Antennas", IEEE International Symposium on Wireless Communication Systems, ISWCS-2012

- [21] Islam E. Kotb, Reda S. Ghoname, Hussein H. Ghouz and Hani H. Kaldass, "Compact MIMO Antenna for 4G Transceiver Application", Journal of Applied Sciences Research, JASR-8(7), July, 2012
- [22] Hussein H. M. Ghouz, "New Compact Microstrip Patch Filtenna Structures with Partitioned Ground for 3G/4G Applications", International Journal of Engineering and Technology, IJET-IJENS-Vol.12, Issue No. 05, pp.113-117, October, 2012
- [23] Safa Hussein, Hussein Ghouz and Aliaa Youssif, "Performance Analysis and Evaluation of TH-PPM and TH-BPSK under Dynamic Channel Environment", International Journal of Future Computer and Communication, Vol. 1, No. 4, December 2012

Summary about Dr. Ghouz



Doctor Hussein Hamed Mahmoud Ghouz was born in Alexandria, Egypt, in 1959. He received the B.Sc. and M.Sc. degrees in radar and communication systems engineering (Distinction and Honors) from the Military Technical College (MTC) in 1983 and 1990 respectively. He received his Ph.D. degree in electrical engineering from Arizona State University, Tempe in 1996. Doctor Ghouz was a lecturer in the department of radar and Guidance from 1996 to 2000. He joined Modern Academy for engineering and Technology, Maady, Egypt, as lecturer in communication department from 2000 to 2009. From 2009 up till now, Dr. Ghouz is associate professor in electronics and communication department, Arab Academy for Science, Technology and Maritime Transport (AAST), Cairo, Egypt. *His research interest includes modeling and design of flip-chip interconnects in passive MMIC circuit applications, numerical techniques, adaptive space-time filtering techniques, and anti-jamming techniques in pulse Doppler radar systems. In the recent years, Dr. Ghouz is working in the area of analysis and design of compact planar antennas including microstrip, coplanar and stripline circuits for 3G/4G applications.*