Curriculum Vitae

Fadhil Sahib Hasan

Mustansiriyah University – College of Engineering
Mobile: 07700829952
Email: _fadel_sahib@ uomustansiriyah.edu.iq

PERSONAL SUMMARY:

Fadhil S. Hasan was born in Baghdad, Iraq in 1978. He received his B.Sc. degree in Electrical Engineering in 2000 and his M.Sc. degree in Electronics and Communication Engineering in 2003, both from the Mustansiriyah University, Iraq. He received Ph.D. degree in 2013 in Electronics and Communication Engineering from the Basrah University, Iraq. In 2005, he joined the faculty of Engineering at the Mustansiriyah University in Baghdad. His recent research activities are Wireless Communication Systems, Multicarrier System, Wavelet based OFDM, MIMO System, Speech and Image Signal Processing, Chaotic Cryptography, Chaotic Modulation, FPGA and Xilinx System Generator based Communication System. Now he has been an Assist. Prof. at the Mustansiriyah University, Iraq

EDUCATION:

- Ph.D. #1: Basra University/Iraq   2013 (electronic and communication)
- M.Sc. #2: Mustansiriyah University/Baghdad/Iraq   2003 (electronic and communication)
- B.Sc. #3: Mustansiriyah University/ Baghdad/Iraq   2000 (electricity)

ACADEMIC HONORS AND AWARDS:

- #1: Thank books from the college and university of Mustansiriyah
- #2: Thank books from the Ministry

ACADEMIC /TEACHING EXPERIENCE:

- #1: Teach in Electrical Eng. Department and its lab for undergraduate study from 2005 and until day

COURSES TAUGHT:

Undergraduate	Graduate
Computer 2nd, electronic 2nd, communication 3rd, communication 4th, mathematics 2nd, and eng. Analysis 3rd.	Communication MSc course in computer department. Advanced Math. MSc course in Electrical department. Advanced FPGA MSc course in Electrical department. Spread Spectrum PhD course in Electrical department.

PROFESSIONAL AFFILIATIONS:

PUPLICATIONS:

1. **Thesis**

1. Fadhil S. Hasan, "Cepstral Based Speaker Recognition System", MSc. Thesis , Mustansiriyah Unoversity,

Baghdad, Iraq 2002.

2. FAdhil S. Hasan, "Performance Analysis of Complex Wavelet Packet Modulation (CWPM) and Implementation on FPGA", PhD Thesis, Basrah University, Iraq, 2013.

2. Journal and conference Papers:

1. Fadhil S. Hasan, "Performance of Discrete Wavelet Transform (DWT) Based Speech Denoising in Impulsive and Gaussian Noise", Journal of Engineering and Development, Vol. 10, No.2, pp.175-193, Jun 2006.

2. Fadhil S. Hasan, "The Performance of OFDM with Blanking Nonlinearity in Impulsive and Gaussian Noise", Journal of Engineering and Development, Vol. 11, No.1, pp.123-139, March 2007.

3. Ahmed K. Hassan and Fadhil S. Hasan, "Hybrid Differential Pulse Code Modulation in Wavelet Domain and Lossless Methods for Image Compression", Iraqi Journal of Computer, Communication, Control and System Engineering (IJCCCE), Vol. 7, No.1, pp. 111-124, 2007.

4. Fadhil S. Hasan and Mohanad E. Okab, "The performance of Wavelet Packet Division Multiplexing in Impulsive and Gaussian Noise", Journal of Engineering and Development, Vol. 12, No.4, pp.115-127, 2008.

5. Fadhil S. Hasan, "Speech Compression using Discrete Wavelet Transform with Optimum Differential Pulse Code Modulation (DPCM) ", Iraqi Journal of Computer, Communication, Control and System Engineering (IJCCCE), Vol. 8, No.1, pp. 17-24, 2008.

6. Khamis A. Ziden. Raghad Z. Al-Macdici, Fadhil S. Hasan and Noor Al-Mahdaoy, "The performsnce of Turbo Coded Orthogonal Frequency Division Multiplexing System over Flat Rayleigh Fading Channel", Journal of Engineering and Development, Vol. 13, No.1, pp.73-88, March 2009.

7. Muneer Aboud Hashem and Fadhil S. Hasan, "Photocurrent Mechanisms and Performance Considerations of A Reach Through P^+-N-N^+ Silicon Photodiode ", Journal of Engineering and Development, Vol. 14, No.4, pp.1-19, December 2010.

8. Fadhil S. Hasan and Ammar G. Samir, "Performance Evaluation of Wavelet Packet Based Multicarrier Modulation (WPMCM) System with PAPRs Reduction over Frequency Selective Rayleigh Fading HF Channel" Journal of Engineering and Development, Vol. 15, No.1, pp.1-17, March 2011.

9. Hikmat N. Abdullah and Fadhil S. Hasan, "Performance Evaluation of Complex avelet Packet Modulation (CWPM) System over Multipath Rayleigh Fading Channel", Journal of Signal and Information Processing (JSIP), USA, ISSN 2159-4465, Vol. 3, No. 3, pp. 352-359, 2012.

10. Hikmat N. Abdullah, Fadhil S. Hasan and Alejandro Valenzuela, "Hybrid PAPR Reduction Technique for Complex Wavelet Packet Modulation System", IEEE International Wireless Days WD'12 Conference, Dublin, Ireland, pp. 1-3, 2012.

11. Hikmat N. Abdullah, Majid A. Alan and Fadhil S. Hasan, "Performance Evaluation of Dual Tree Complex Wavelet Packet Modulation (DT-CWPM) System over Multipath Rayleigh Fading Channel, Engineering and Technology Journal, Vol. 31, No.5, pp. 992-1010, 2013.

12. Hikmat N. Abdullah, Majid A. Alan and Fadhil S. Hasan, "PAPR Reduction of Complex Wavelet Packet Modulation (CWPM) System using a Novel Hybrid Technique over Selective Rayleigh Fading Channel", Journal of Engineering and Development, Vol. 17, No.1, pp. 100-113, Mar. 2013. Hikmat N. Abdullah, Fadhil S. Hasan and Alejandro Valenzuela, "FPGA Based Fast Complex Wavalet Packet Modulation (FCWPM) system", Proceeding of IEEE

International Conference on Circuits and Systems (IGCAS2013), September 2013.

13. Hikmat N. Abdullah, Fadhil S. Hasan and Alejandro Valenzuela, "FPGA Based pi/4-DQPSK Complex Wavalet Packet Modulation", IEEE 21st Symposium on Communications and Vehicular Technology in the Benelux (SCVT), pp. 85-89, Delft, Nov. 2014.

14. Fadhi S. Hasan, "Speech Encryption Using Fixed Point Chaos based Stream Cipher", Eng. &Technology Journal, vol.34 , no. 11, pp. 2152-2166 ,2016.

15. Fadhil S. Hasan, " FPGA Based 2×2 MMSE MIMO-OFDM System Using Xilinx System Generator ", Jounal of Eng. And Development, 2016.

16. Fadhil S. Hasa0n, "Design and Analysis of an OFDM-Based Short Reference Quadrature Chaos Shift Keying Communication System" Wireless Personal Communications, vol. 96, no. 2, pp. 2205–2222, September 2017.

17. Fadhil S. Hasan, Alejandro A. Valenzuela,", Design and Analysis of an OFDM-Based Orthogonal Chaotic Vector Shift Keying Communication System," IEEE Access, 2018.

18. Fadhil S. Hasan, Mohammed J. and Rawa A., "Design and Analysis of a Wavelet Packet Modulation Based Differential Chaos Shift Keying Communication System," Wireless Personal Communications 2019, https://doi.org/10.1007/s11277-019-06691-6 .

PROFFESSIONAL DEVELOPMENT

- Certifications.
  1-Certification from Prof. Dr. Alejandora Valenzuela. Where I work in the field of multicarrier communication systems with FPGA at the department of EMT at Bonn-Rhein-Sieg University of Applied Sciences as a guest PhD student during the period 5-11-2012 until 6-2-2013.

- Conferences.
1- THE INTERNATIONAL ARAB CONFERENCE ON INFORMATION TECHNOLOGY (ACIT2014)
2- IEEE International conference on circuit and system 2013.
3- IEEE international wireless Days WD'12 Conference, Dublin, Ireland, 2012.
4. ACM International Conference Proceeding Series, Baghdad, 2019.

5. 4th Scientific International Conference-Najaf (4th SICN-2019).

Signature Head of Department

رئيس قسم الهندسة الكهربائية
٣٠٢

Signature Vice Dean

الاستاذ المساعد الكتور
علي خالد جاسم
معاون العميد للشؤون العلمية

السيرة الذاتية

فاضل صاحب حسن

الجامعة المستنصرية – كلية الهندسة
Mobile: +964 7700829952
Email: fadel_sahib@ uomustansiriyah.edu.iq

ملخص تعريفي:

ولد فاضل صاحب حسن في بغداد، العراق عام ١٩٧٨. حصل على درجة البكالوريوس في الهندسة الكهربائية عام ٢٠٠٠ وحاصل على شهادة الماجستير في هندسة الإلكترونيات والاتصالات عام ٢٠٠٣، وكلاهما من الجامعة المستنصرية، العراق. حصل على شهادة الدكتوراه في هندسة الالكترونيات والاتصالات من جامعة البصرة في العراق عام ٢٠١٣. وفي عام ٢٠٠٥ التحق بكلية الهندسة في الجامعة المستنصرية في بغداد . أنشطته البحثية الأخيرة هي أنظمة الاتصالات اللاسلكية، نظام الموجات الحاملة المتعددة، OFDM القائم على المويجات، نظامMIMO ، معالجة إشارات الكلام والصورة، التشفير الفوضوي، التعديل الفوضوي، FPGA ونظام الاتصالات القائم على مولد نظام XILINX. الآن هو أستاذ في الجامعة المستنصرية، العراق.

الشهادات الدراسية:

- Ph.D. #1: جامعة البصرة , كلية الهندسة (الكترونيك واتصالات) ٢٠١٣
- M.Sc. #2: الجامعة المستنصرية, كلية الهندسة (الكترونيك واتصالات) ٢٠٠٣
- B.Sc. #3 : الجامعة المستنصرية, كلية الهندسة (كهرباء عام) ٢٠٠٠

الجوائز والتكريم الأكاديمي

- #1: شكر وتقدير من كلية الهندسة قسم الكهرباء لنيل شهادة الدكتوراه
- #2: شكر ةتقدير من جامعة البصرة لنيل شهادة الدكتوراه

المقررات الدراسية التي تم تدريسها:

الدراسات الأولية	الدراسات العليا
حاسبات ثاني-الكترونيك ثاني- اتصالات ثالث- اتصالات رابع- رياضيات ثاني- تحليلات ثالث	اتصالات-ماجستير (قسم الحاسبات)-رياضيات متقدمة-ماجستير (قسم الكهرباء)

الأنتساب المهني او الجمعيات:

- لجان :اللجنة الامتحانية ٢٠١٣-٢٠١٤ , لجنة صيانة الاجهزة المختبرية في الكلية , لجان تدقيق البحوث والاستلال العلمي ومناقشات اطاريح الدكتوراه والماسجتير
- رئيس لجنة في استحداث مختبر الـ FPGA

الرمنشورات العلمية

1. **Thesis**

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• تطوير المهارات:

Certification from Prof. Dr. Alejandora Valenzuela. Where I work in the field of multicarrier communication systems with FPGA at the department of EMT at Bonn-Rhein-Sieg University of Applied Sciences as a guest PhD student during the period 5-11-2012 until 6-2-2013.

المؤتمرات

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2- IEEE International conference on circuit and system 2013.
3- IEEE international wireless Days WD'12 Conference, Dublin, Ireland, 2012.
4- ACM International Conference Proceeding Series, Baghdad, 2019.

5- 4th Scientific International Conference-Najaf (4th SICN-2019).

توقيع معاون العميد

الأستاذ المساعد الدكتور
علي خالد جارس
معاون العميد للشؤون العلمية

توقيع رئيس القسم

ا.م.د. ياسين يوسف محمد
رئيس قسم الهندسة الكهربائية
٢-٣