

Lecturer ...Dr. HILAL Adnan Fadhil.....

Department of Computer engineering.

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Education:

PhD, University of MALAYSIA PERLIS, Year 2011

MSc, University of Al-Nahrain , Year 2005

BSc, University of Al-Nahrain, Year 2002

Profile:

Currently a lecturer at Al-Farabi University College and His research interests include Free-space optic, Optical CDMA for Optical Access Networks. He holds several copyright, patents in the UK and Malaysia and published more than 100 reviewed conference papers and indexed journal articles. Owing to his many research and product achievements and contributions, Hilal A. Fadhil was awarded many Awards and Medals in UK, Germany, South Korea and Malaysia; He is a senior member of IEEE communication (MIEEE-USA); Member of the Institution of Engineering & Technology (MIET-UK)

Teaching

Digital control system, 3rd year

Circuit Theory , 1st year

Research Focus

- Wireless Communication System (MIMO system, Channel coding, OFDM)
- High-speed Protocols Networks (Inter-Satellite free space optics link) Switching system architecture.
- Hybrid Communication systems (Optical CDMA, WDM, Free space optics (FSO), Optical OFDMA, Non-linears, Lifi and Optical Sensors).

Publications

(تدرج أهم وأحدث المنشورات العلمية والبحثية بشكل مصادر على الا تتجاوز 10-15 منشور)

1. Hilal A. Fadhil et. al “ High attitude platform free space optics system using various filtering operations for 5G system” Optical and Quantum Electronics, 53, Article 475 (Aug. 2021)
2. Hilal A. Fadhil “Satellite-to-Ground FSO System Based on Multiaperture Receivers as an Optimization Solution for Strong Turbulence and Fog Conditions”, Journal of Optical Communications on February 14, 2020.
3. Hilal A. Fadhil “Cost-Effective Access Based Android System of Mobile Application for Blind Person” International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue-2S8, August 2019
4. Basma Al-Subhi1, Feras N. Hasoon1, Hilal A. Fadhil “Smart vehicle headlights control system” AIP Conference Proceedings 2137, 030001 (2019), MALAYSIA
5. Hilal A. Fadhil “ Development of GUI optical sensor based on Thin Film Filter” Journal of Babil university for Engineering science, vol.25, issue no. 4, 2017.
6. Hudhaifa Mazin, Hilal A. Fadhil " Linear and Non-Linear Modeling of Solar Energy Production for Zone, Region, and Global Areas" Chapter in book @ Renewable Energy in the service of Mankind Vol.III, Springer Link, 2014.
7. Abd, H.J., Fadhil, H.A., Al-Mansoori, M.H., Din, N.M., Abdullah, F., “Four-wave mixing reduction technique based on smart filter approach”, International Journal of Electronics, 102 (6), pp. 1056-1070, 2015.
8. Fadhil, H.A., Abdulqader, S.G., Aljunid, S.A. “Implementation of wireless power transfer system for Smart Home applications” 2015 IEEE 8th GCC Conference and Exhibition, GCCCE 2015; Muscat; Oman; 1 February 2015 through 4 February 2015
9. Ahmed, N., Fadhil, H.A., Aljunid, S.A., Sharafat Ali, M., Rahman, M. “Performance analysis of WDM-PON system based on optimized remotely pumped erbium-doped fiber amplifier (EDFA) parameter”, Journal of Optical Communications, 36 (2), pp. 103-108, 2015.
10. Jaber, S.S., Fadhil, H.A., Abdul Khalib, Z.I., Kadhim, R.A. “Survey on recent digital image steganography techniques” Journal of Theoretical and Applied Information Technology Volume 66, Issue 3, 31 August 2014, Pages 714-728
11. Abdulqader, S.G., Fadhil, H.A., Aljunid, S.A., Safar, A.M “Performance analysis of an OCDMA system based on SPD detection utilizing different type of optical filters for access networks” (2015) Springer Lecture Notes in Electrical Engineering, 315, pp. 309-319.
12. Kadhim, R.A., Fadhil, H.A., Aljunid, S.A., Razalli, M.S. “ A new two dimensional spectral/spatial multi-diagonal code for noncoherent optical code division multiple access (OCDMA) systems” (2014) Optics Communications, 329, pp. 28-33.

Affiliations/Activities

Senior Member (SMIEEE)-USA

Member IET (MIET)-UK