

# *Curriculum Vitae*

## Taissir Youssef Elganimi



### Personal Information

- **Date of Birth:** April 26, 1988
- **Place of Birth:** Tripoli, Libya
- **Nationality:** Libyan
- **Mobile Phone Number:** +218(0)925452010 (Libya)
- **E-mail Addresses:** [t.elganimi@uot.edu.ly](mailto:t.elganimi@uot.edu.ly) & [t.elganimi@ieee.org](mailto:t.elganimi@ieee.org)

- **Links:**

Researchgate: [https://www.researchgate.net/profile/Taissir\\_Elganimi](https://www.researchgate.net/profile/Taissir_Elganimi)

Publons: <https://publons.com/researcher/1577140/taissir-y-elganimi/>

LinkedIn: <https://www.linkedin.com/in/taissir-y-elganimi-a6592652/>

Google Scholar: <https://scholar.google.com/citations?user=dI14TTIAAAAJ&hl=en>

- **ORCID:** 0000-0002-2401-6264

### Education

2014-2015 **MSc degree** in “Wireless Communications” from School of Electronics and Computer Science (ECS) at University of Southampton, United Kingdom.

**General Grade:** With Distinction (First-class Honours).

**MSc Project Title:** Spatial Modulation with Hybrid Analog-Digital Beamforming.

**Supervisor:** Assoc. Prof. Mohammed El-Hajjar.

2006-2010 **BSc degree** in “Electronics and Communication Engineering” from Electrical and Electronic Engineering Department at University of Tripoli, Libya.

**General Grade (Average):** Very Good (77.89%).

**BSc Project Title:** Free Space Optics (FSO) as a Solution to Link Main Hospitals in Tripoli.

**Supervisor:** Prof. Abdulkader S. Akki.

2002-2006 **Engineering Sciences Secondary School Certificate** in “Electrical and Electronics Engineering” from Shuhadaa Al Shatt School, Tripoli, Libya.

**General Grade (Average):** Excellent (94.5%).

### Experience

Sept 2020 to  
present

**Lecturer** in Electrical and Electronic Engineering Department at University of Tripoli, Libya.

Jan 2016 to Sept  
2020

**Assistant Lecturer** in Electrical and Electronic Engineering Department at University of Tripoli, Libya.

Courses taught and laboratory experiments were given in the following courses and labs:

- **EE202 - Electric Networks.**
- **EE219 - Basic Electronic Circuits.**
- **EE302 - Signals and Systems.**
- **EE201 - Electrical Laboratory.**
- **EE311 - Electronic Laboratory.**

- **EE421 - Communication and Electronics Laboratory I.**
  - **EE491 - Computer Applications and Design Laboratory.**
- Nov 2019 to present
- Coordinator of study and exams in Electrical and Electronic Engineering Department at University of Tripoli.
- Sept 2017 to present
- Publons Academy Graduate and Peer Reviewer:**
- Certified Publons Academy peer reviewer upon completion of the Publons Academy peer review course.
  - Responsible for academic review of scientific manuscripts for several international journals in the field of wireless communications, multifunctional MIMO, index modulation, etc.
- Oct 2016 to March 2019
- Co-operator as an Assistant Lecturer** in College of Electronic Technology - Tripoli, Libya.
- Courses taught:
- **EE111 - Electronic Circuits I.**
  - **EE241 - Signals and Systems.**
- Nov 2011 to Nov 2013
- Teaching Assistant** in Electrical and Electronic Engineering Department at University of Tripoli, Libya.
- Tutorial lectures were given for groups of students in the following modules:
- **EE219 - Basic Electronic Circuits.**
  - **EE319 - Analog Electronic Circuits.**
  - **EE419 - Digital Electronic Circuits.**
  - **EE342 - Electrical Power Engineering I.**
  - **EE462 - Digital Control Systems.**
- July to Aug, 2010
- Summer Training Programme** in Artificial Lift Department at Schlumberger Company, in Anjila Base, Tripoli, Libya,
- Project:** “Testing and Repairing Down-hole Electrical Submerged Pump (ESP) Power Cable and ESP Overview”.

## Areas of Interests

- Multi-functional MIMO, Index Modulation, and Millimetre-wave Communications.
- Reconfigurable Intelligent Surfaces for 6G Communications.
- Optical Communications.
- Design of Analog, Pulse and Digital Electronic Circuits.

## Academic Collaborations

- Prof. Ammar M. Abu-Hudrouss, Islamic University of Gaza, Palestine.
- Assis. Prof. Dr. Khaled M. Rabie, Manchester Metropolitan University, UK.

## Languages

ARABIC and ENGLISH.

## Skills and Programming

Software programming ability in MATLAB, MULTISIM, and Optiwave simulation programs.

## International Journal Publications

- [J1] **Taissir Y. Elganimi**, “Performance Comparison between OOK, PPM and PAM Modulation Schemes for Free Space Optical (FSO) Communication Systems: Analytical Study,” *International Journal of Computer Applications (IJCA)*, Published by Foundation of Computer Science, New York, USA, vol. 79, no. 11, pp. 22-27, October 2013.
- [J2] **Taissir Y. Elganimi** and Feras F. Alfitouri, “Norm-Based User Selection Algorithm for Single-RF Space Modulation Techniques with Geometric Mean Decomposition Based Precoding Scheme,” *SN Applied Sciences Journal, Springer*, 3:91, January 2021.

## International Conference Publications

- [C1] **Taissir Y. Elganimi**, “Studying the BER Performance, Power- and Bandwidth- Efficiency for FSO Communication Systems under Various Modulation Schemes,” 2<sup>nd</sup> IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT 2013), Amman-Jordan, December 3-5, 2013.
- [C2] **Taissir Y. Elganimi**, “Design and Analysis of a Bootstrap Ramp Generator Circuit Based on a Bipolar Junction Transistor (BJT) Differential Pair Amplifier,” International Conference on Circuits and Systems (ICCS’14), San Francisco, California, USA, October 22-24, 2014.
- [C3] **Taissir Y. Elganimi** and Ali A. Elghariani, “Space-Time Block Coded Spatial Modulation Aided mmWave MIMO with Hybrid Precoding,” The 26<sup>th</sup> IEEE Signal Processing and Communications Applications Conference (SIU), Izmir, Turkey, May 2-5, 2018.
- [C4] **Taissir Y. Elganimi**, Mohammed S. Alshawish and Moustafa M. Abdalla, “Enhanced Transmit Antenna Selection Using OSTBC Scheme with SVD-Based Hybrid Precoding for 5G Millimeter-wave Communications,” 2019 6<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE 2019), Istanbul, Turkey, April 16-17, 2019.
- [C5] **Taissir Y. Elganimi** and Marwan B. Elkhoja, “Improved Orthogonal Space-Time Block Codes with Multiple Transmit Antennas Using Hadamard Transform,” 2019 6<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE 2019), Istanbul, Turkey, April 16-17, 2019.
- [C6] Akram A. Marseet and **Taissir Y. Elganimi**, “Fast Detection Based on Customized Complex Valued Convolutional Neural Network for Generalized Spatial Modulation Systems,” 2019 IEEE Western New York Image and Signal Processing Workshop (WNYISPW), Rochester, New York, USA, October 4, 2019. (It was added to the Research Library of the IEEE Machine Learning for Communications Emerging Technologies Initiatives).
- [C7] **Taissir Y. Elganimi** and Amani A. Aturki, “Joint User Selection and GMD-Based Hybrid Beamforming for Generalized Spatial Modulation Aided Millimeter-wave Massive MIMO Systems,” in the proceeding of the 3<sup>rd</sup> IEEE International Conference on Information Communication and Signal Processing (ICICSP), Shanghai, China, pp. 364-369, September 12-15, 2020.
- [C8] **Taissir Y. Elganimi**, Fatima I. Alwerfly, and Akram A. Marseet, “Distributed Generalized Spatial Modulation for Relay Networks,” in the 28<sup>th</sup> IEEE Conference on Signal Processing and Communications Applications (SIU), Gaziantep, Turkey, October 5-7, 2020.
- [C9] Amal A. Algedir and **Taissir Y. Elganimi**, “Machine Learning Algorithms for Predicting the Quality Factor of FSO Systems with Multiple Transceivers,” in the 2<sup>nd</sup> IEEE Global Power, Energy and Communication (GPECOM) Conference, Izmir, Turkey, October 20-23, 2020.

- [C10] **Taissir Y. Elganimi** and Khaled M. Rabie, “Multidimensional Generalized Quadrature Index Modulation for 5G Wireless Communications,” in the 93<sup>rd</sup> IEEE Vehicular Technology Conference (VTC2021-Spring), April 25-28, 2021.
- [C11] **Taissir Y. Elganimi** and Khaled M. Rabie, “Time-Indexed Parallel Spatial Modulation for Large-scale MIMO Systems with Antenna Grouping,” in the 93<sup>rd</sup> IEEE Vehicular Technology Conference (VTC2021-Spring), April 25-28, 2021.
- [C12] Moustafa M. Abdalla and **Taissir Y. Elganimi**, “Performance Evaluation of the Impact of Mutual Coupling on DOA Estimation in Wireless Systems,” in 2021 IEEE 1<sup>st</sup> International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA), Tripoli, Libya, May 25-27, 2021.
- [C13] Ahmed M. Badi, **Taissir Y. Elganimi**, Osama A. Alkishriwo, and Nadia A. Adem, “Channel Estimation Based on Machine Learning Paradigm for Spatial Modulation OFDM,” in 2021 IEEE 1<sup>st</sup> International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA), Tripoli, Libya, May 25-27, 2021.
- [C14] Nura K. Daghari, **Taissir Y. Elganimi** and Khaled M. Rabie, “Energy-Efficient Hybrid Precoding Schemes for RIS-Assisted Millimeter-wave Massive MIMO,” in IEEE International Mediterranean Conference on Communications and Networking (MeditCom), Athens, Greece, September 7-10, 2021.

## Professional Activities

### Society Memberships:

- IEEE Senior Membership.
- IEEE Communications Society Membership.
- IEEE Vehicular Technology Society Membership.
- IEEE Young Professionals Membership.

### Reviewing Activities for the following journals:

- IEEE Access.
- IEEE Transactions on Communications.
- IEEE Transactions on Wireless Communications.
- IEEE Transactions on Vehicular Technology.
- IEEE Transactions on Signal Processing.
- IEEE Communication Letters.
- IEEE Wireless Communication Letters.
- IEEE Communications Magazine.
- Journal of Optical Communications (JOC).
- Journal of Computer Science (JCS).
- Journal of Wireless Communications and Mobile Computing (Hindawi).

### Technical Program Committee (TPC) member and reviewer for:

- The 6<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE 2019), Istanbul, Turkey, April 16-17, 2019.
- The 7<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE 2020), Antalya, Turkey, April 14-16, 2020.
- The 10<sup>th</sup> IEEE Annual Computing and Communication Workshop and Conference Venue (IEEE CCWC 2020), University of Nevada, Las Vegas, USA, January 6-8, 2020.

- IEEE Wireless Communications and Networking Conference (IEEE WCNC 2020), Seoul, South Korea, April 6-9, 2020.
- The 2<sup>nd</sup> IEEE International Conference on Computer Communication and the Internet (IEEE ICCCI 2020), Nagoya, Japan, June 26-29, 2020.
- IEEE Wireless Communications and Networking Conference (IEEE WCNC 2021), Nanjing, China, March 29 to April 1, 2021.
- The 8<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE 2021), Antalya, Turkey, April 9-11, 2021.
- The 1<sup>st</sup> IEEE International Maghreb Meeting of the Conference on Sciences and Techniques of Automatic Control and Computer Engineering (MI-STA), Tripoli, Libya, May 25-27, 2021.
- IEEE Global Communications Conference (IEEE GLOBECOM 2021), Madrid, Spain, December 7-11, 2021.
- The 9<sup>th</sup> International Conference on Electrical and Electronics Engineering (ICEEE 2022), Alanya, Turkey, March 29-31, 2022.
- IEEE Wireless Communications and Networking Conference (IEEE WCNC 2022), Austin, TX, USA, April 10-13, 2022.

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