

## Curriculum Vitae (CV)

**Kareem Ahmed Badawi Abd Al-Rahman**



### Personal Information:

**Academic Rank:** Assistant Professor

**Department:** Electrical Engineering

**Specialization:** Electronic and Communication Engineering

**Position:** Assistant Professor at Electrical Engineering Department

**Google Scholar:** Kareem Ahmed Badawi - Google Scholar

**Research Gate:** Kareem Badawi

**ORCID Record:** 0000-0001-8168-2506

**Scopus ID:** 57203517189

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**Mobile/WhatsApp:** +20/1000478066

**Education:**

Degree	Discipline	Institution	Year
Ph.D.	Electronics and Communication Engineering	Minia University	2021
M.Sc.	Electronics and Communication Engineering	Arab Academy for Science, Technology & Maritime Transport	2016
B.Sc.	Electrical Engineering	Higher Technological institute, 10 <sup>th</sup> of Ramadan 6 <sup>th</sup> of October branch	2010

**Academic Experience:**

**Institution:** Higher Technological Institute H.T.I, 10<sup>th</sup> of Ramadan, 6<sup>th</sup> of October branch

**Rank:** Assistant Professor

**Dates:** 2021 - Present

**Institution:** Higher Technological Institute H.T.I, 10<sup>th</sup> of Ramadan, 6<sup>th</sup> of October branch

**Rank:** Research Assistant (PhD student)

**Dates:** 2018 - 2021

**Institution:** Higher Technological Institute H.T.I, 10<sup>th</sup> of Ramadan, 6<sup>th</sup> of October branch

**Rank:** Teaching Assistant

**Dates:** 2011 - 2018

### **Research interests:**

- Visible light communication
- Artificial intelligence
- Machine learning
- Optical communication
- Satellite communication
- Digital communication

### **Publications:**

- Badawi, K.A., Mohammed, N.A. and Aly, M.H., 2018. Exploring BER performance of a SC-LPPM based LOS-VLC system with distinctive lighting. JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS, 20(5-6), pp.290-301.
- Mohammed, N.A. and Badawi, K.A., 2018. Design and Performance Evaluation for a Non-Line of Sight VLC Dimmable System Based on SC-LPPM. IEEE Access, 6, pp.52393-52405.
- Mohammed, N.A., Badawi, K.A., Khalaf, A.A. and El-Rabaie, S., 2020. Dimming control schemes combining IEEE 802.15. 7 and SC-LPPM modulation schemes with an adaptive M-QAM OFDM for indoor LOS VLC systems. Opto-Electronics Review, pp.203-212.
- Mohammed, N.A., Badawi, K.A., Khalaf, A.A. and El-Rabaie, S., 2020. Performance Evaluation of Utilizing M-QAM OFDM with SC- LPPM for Indoor LOS-VLC Systems. Journal of Advanced Engineering Trends Minya University, Faculty of Engineering.  
doi:10.21608/jaet.2021.67773.1100

**Certifications or Professional Registrations:**

<b><i>National Telecommunication Institute, Cairo, Nasr City</i></b>	<b>2007</b>
<ul style="list-style-type: none"> <li>• Electronics</li> <li>• OrCAD Simulator &amp; Practical implementation</li> </ul>	
<b><i>Industrial Systems Training Center, Cairo, Mid Town</i></b>	<b>2008</b>
<ul style="list-style-type: none"> <li>• PLC</li> <li>• Touch Screen</li> <li>• SCADA ( Fair Skills )</li> </ul>	
<b><i>New Horizons Training Center, Giza, 6<sup>th</sup> Of October</i></b>	<b>2009</b>
<ul style="list-style-type: none"> <li>• Mobile Package (GSM, GPRS, CDMA,&amp; UMTS)</li> <li>• WiMAX &amp; LTE Basics</li> </ul>	
<b><i>Systel ( Motorola Cooperation ), Smart Village, 6<sup>th</sup> Of October</i></b>	<b>2010</b>
<ul style="list-style-type: none"> <li>• WiMAX [ IEEE 802.16e – 2005 ]</li> </ul>	
<b><i>Legends Center, District VII, 6<sup>th</sup> of October</i></b>	<b>2010</b>
<ul style="list-style-type: none"> <li>• Time Management</li> <li>• Communication Skills</li> </ul>	
<b><i>National quality assurance agency</i></b>	
<ul style="list-style-type: none"> <li>• Unifying concepts for quality assurance</li> </ul>	<b>2012</b>
<ul style="list-style-type: none"> <li>• Strategic plan design for higher education institutes</li> </ul>	<b>2013</b>
<ul style="list-style-type: none"> <li>• Course description design</li> </ul>	<b>2014</b>
<ul style="list-style-type: none"> <li>• Scientific thinking and argumentation skills for problem solving</li> </ul>	<b>2015</b>
<ul style="list-style-type: none"> <li>• Design and preparation of self-study of institutions of higher education</li> </ul>	<b>2016</b>
<ul style="list-style-type: none"> <li>• Questionnaire's design and data collection methods</li> </ul>	<b>2017</b>
<ul style="list-style-type: none"> <li>• Program design according to NARS requirements</li> </ul>	<b>2022</b>
<b><i>DAD</i></b>	
<ul style="list-style-type: none"> <li>• Design and evaluation of examination papers</li> </ul>	<b>2018</b>
<ul style="list-style-type: none"> <li>• Proposal writing for post Docs</li> </ul>	<b>2019</b>
<ul style="list-style-type: none"> <li>• Academic program design according to NARS 2018</li> </ul>	<b>2022</b>
<ul style="list-style-type: none"> <li>• Learning through projects</li> </ul>	<b>2022</b>
<b><i>Faculty Development Center - Minya University</i></b>	
<ul style="list-style-type: none"> <li>• EndNote</li> </ul>	<b>2019</b>
<ul style="list-style-type: none"> <li>• Statistical Package for the Social Sciences ( SPSS )</li> </ul>	<b>2019</b>
<b><i>Faculty Leadership Development Center - Minya University</i></b>	
<ul style="list-style-type: none"> <li>• Ethics of scientific research</li> </ul>	<b>2019</b>
<ul style="list-style-type: none"> <li>• Develop the skills of training, presentation and communication for students</li> </ul>	<b>2019</b>
<ul style="list-style-type: none"> <li>• Fundamentals of digital transformation certificate</li> </ul>	<b>2021</b>

### Honors and Awards:

- Ideal teaching assistant engineer for electrical and computer department 2016.

### Teaching Experience:

#### **Higher Technological Institute H.T.I, 10<sup>th</sup> of Ramadan, 6<sup>th</sup> of October branch**

- |   |                     |   |                    |
|---|---------------------|---|--------------------|
| • Part time Teaching Assistant Engineer | <b>October 2010</b> | - | <b>June 2012</b>   |
| • Teaching Assistant Engineer           | <b>June 2012</b>    | - | <b>August 2018</b> |
| • Assistant Lecturer                    | <b>August 2018</b>  | - | <b>June 2021</b>   |

### Courses taught

- Principles of Electric Circuits
- Artificial Intelligence
- Data Communication and Networking
- Electric Circuits 2
- RF Circuits Design
- Communication 1 – Analog Communication
- Communication 2 – Digital Communication
- Communication 3 – Optical Communication
- Wireless Communications
- Computer Skills
- Computer Programming
- Quality Engineering
- Digital Logic Design