

**1. Name: Sahar Kamal Hessian,** Assistance Professor, Communication and Computers department, El Shorouk Academy

**2. Degrees:**

- B.S. (Computer engineering) Faculty of Engineering - Al-Azhar University, Cairo, Egypt 2008
- M.S. (Computer engineering) Faculty of Engineering - Al-Azhar University, Cairo, Egypt 2016
- Ph.D. (Computer engineering) Faculty of Engineering - Al-Azhar University, Cairo, Egypt 2021

**3. Years of Service on Faculty: 3**

- 2/2021-Present Assistance Professor

**4. Other Experience:**

- 2/2024 to 5/ 2024: Assistance Professor, Biomedical Engineering Department, the Higher Technological Institute

**5. Consulting Activities (selected)**

- None.

**6. States in which registered:**

- Cairo, Egypt.

**7. Principal publications of last 5 years (selected):**

- Sahar K. Hussin, Salah M. Abdelmageid, Adel Alkhalil, Yasser M. Omar, Mahmoud I. Marie, Rabie A. Ramadan, "Handling Imbalance Classification Virtual Screening Big Data Using Machine Learning Algorithms", Complexity, vol. 2021, Article ID 6675279, 15 pages, 2021. <https://doi.org/10.1155/2021/6675279>
- S. K. Hussin, Y. M. Omar, S. M. Abdelmageid, and M. I. Marie, "Traditional machine learning and big data analytics in virtual screening: a comparative study," International Journal of Advanced Computer Research, vol. 10, no. 47, pp. 72–88, 2020.
- Sahar K. Hussin, Salah M. Abdelmageid, Yasser M. Omar, Mahmoud I. Marie, Rabie A. Ramadan, " Imbalance Classification in Big Data ", is accepted in Al-Azhar Engineering Fifteenth International Conference (AEIC 2021)
- Kamal, S., Ramadan, R.A., and Fawzy, E.R. (2016). "Smart outlier detection of wireless sensor network". Facta Universitatis, series: Electronic and Energetics, Vol. 29, No. 3, pp. 383–393.
- K. Hussin, S., Mohamed, O, Mohamed, M, Ahmed, E, & Mahmoud, (2024). Real-time Arabic sign language translator Using media pipe and LSTM. PLOMS AI,

**8. Scientific and professional societies of which a member**

- Egyptian Engineers Association
- Egyptian electric Engineers Syndicate

**9. Honors and awards:**

- None

**10. Institutional & professional service in last 5 years:**

- Computer and control engineering program coordinator in the Higher Institute of Engineering at El-Shorouk Academy.
- Chairman of the team of the program Standard of reinforcement and development standard in the quality assurance unit at the Department of Communication and Computer Engineering in the Higher Institute of Engineering at El-Shorouk Academy (2019 - until now).
- Member of the educational affairs committee at the Department of Communication and Computer Engineering in the Higher Institute of Engineering at El-Shorouk Academy (2021- until now).
- Member of Sub-unit for quality assurance at the Department of Communication and Computer Engineering in the Higher Institute of Engineering at El-Shorouk Academy (2021- until now).
- Member of reinforcement and development committee at the Department of Communication and Computer Engineering in the Higher Institute of Engineering at El-Shorouk Academy (2021- until now).

**11. Professional Development Activities in the last 5 years:**

- Training on "Artificial intelligent" in Huawei talent ITB 2020.
- Training on "Big Data" in Huawei talent ITB 2022