Soha Abdallah Abdelhafiz Nossier

Education

2019 to 2022	**Doctor of Philosophy (PhD)**, University of East London, London, UK **Thesis Title:** Deep Learning-based Speech Enhancement for Real-life Applications
2015 to 2019	**Master of Science (M.Sc.)** in Biomedical Devices, Medical Research Institute, University of Alexandria, Alexandria, Egypt **Thesis Title:** Hearing Aids Performance Enhancement using Computerized Techniques
2009 to 2014	**Bachelor of Science (B.Sc.)** in Electrical Engineering – Communications and Electronics, Faculty of Engineering, University of Alexandria, Alexandria, Egypt **Grade:** Excellent with Honor (Ranked the 9th)

Work Experience

27/8/2024 till now	**Lecturer** in Biomedical Engineering, Medical Research Institute, University of Alexandria, Alexandria, Egypt
27/4/2019 to 26/8/2024	**Assistant Lecturer** of Biomedical Engineering, Medical Research Institute, University of Alexandria, Alexandria, Egypt
15/1/2020 to 1/9/2021	**Teaching Assistant** of Artificial Intelligence masters course, University of East London, London, UK
1/11/2015 to 26/4/2019	**Demonstrator** of Biomedical Engineering, Medical Research Institute, University of Alexandria, Alexandria, Egypt
1/10/2015 to 1/2/2016	**Volunteer English Teacher,** Resala Charity Organization, Alexandria, Egypt

Awards and Achievements

University of East London Excellence Full Scholarship for studying PhD in 2019.

I was a nominee for Fulbright Egyptian Student Masters Full Scholarship 2018 to study master's in the US (Grant declined because I was about to finish my master degree with Alexandria university).

My graduation project won the best project prize in communication field in Egyptian Engineering Day (EED) competition.

I am ranked the 9th among communications and electronics department 350 graduates.

Tests

IELTS	**Band:** 7
TOEFL IBT	**Score:** 81
TOEFL ITP	**Score:** 567
GRE	**Analytical Writing Score:** 3 **Quantitative Reasoning Score:** 151 **Verbal Reasoning Score:** 136

Programming Languages

Python
Matlab
C
Basics of: PHP, JavaScript, and VHDL

Courses

Engineering Courses	**Artificial Intelligence:** Deep Learning, Machine Learning **Mobile Communication:** Generations of Mobile Networks **Networking:** CCNA (Routing and Switching) **Microcontrollers:** Arduino, AVR, and PIC **Printed Circuit Board (PCB) Design**
Programming Courses	**Python** Courses **Web Design**: HTML & CSS, JavaScript, and PHP
Business Courses	**PMP, Primavera**

Publications

Nossier, S. A. and Sharif , M. S, "Gender-Specific Speech Enhancement Architecture for Improving Deep Neural Networks Learning," 2024 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT), Sakhir, Bahrain, 2024, pp. 857-862, doi: 10.1109/3ict64318.2024.10824570.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , "A Deep Learning Speech Enhancement Architecture Optimised for Speech Recognition and Hearing Aids", in Proceedings of the 2023 International Conference on Tools with Artificial Intelligence (ICTAI), Atlanta, Georgia, 6-8 November. pp. 1-6.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , " Enhancing Automatic Speech Recognition Quality with a Second-Stage Speech Enhancement Generative Adversarial Network", in Proceedings of the 2023 International Conference on Tools with Artificial Intelligence (ICTAI), Atlanta, Georgia, 6-8 November. pp. 1-7.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , "Convolutional Recurrent Smart Speech Enhancement Architecture for Hearing Aids", in Proceedings of the 2022 INTERSPEECH, Incheon, Korea, 18-22 September. pp. 1-5.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , "Two-stage deep learning approach for speech enhancement and reconstruction in the frequency and time domains," in Proceedings of the 2022 International Joint Conference on Neural Networks (IJCNN), Padua, Italy, 18–23 July. IEEE, 2022, pp. 1–10.

Nossier, S. A., Rizk, M. R. M., el Shehaby, S., & Moussa, N. D. (2022). "Environmental Noise Adaptable Hearing Aid using Deep Learning", INTERNATIONAL ARAB JOURNAL OF INFORMATION TECHNOLOGY, 19(5), 831-841.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , "An experimental analysis of deep learning architectures for supervised speech enhancement," Electronics, vol. 10, no. 1, p. 17, 2021.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , "A comparative study of time and frequency domain approaches to deep learning based speech enhancement," in Proceedings of the 2020 International Joint Conference on Neural Networks (IJCNN), Glasgow, UK, 19–24 July. IEEE, 2020, pp. 1–8.

Nossier, S. A., Wall, J., Moniri, M., Glackin, C., & Cannings, N. , "Mapping and masking targets comparison using different deep learning based speech enhancement architectures," in Proceedings of the 2020 International Joint Conference on Neural Networks (IJCNN), Glasgow, UK, 19–24 July. IEEE, 2020, pp. 1–8.

Nossier, S. A., Rizk, M. R. M., Moussa, N. D. and el Shehaby, S. (2019), 'Enhanced smart hearing aid using deep neural networks', Alexandria Engineering Journal 58(2), 539–550.