

Pyramids Higher Institute (PHI) for
Engineering and Technology, 6th of October



معهد الأهرامات العالي للهندسة والتكنولوجيا بالسادس من أكتوبر

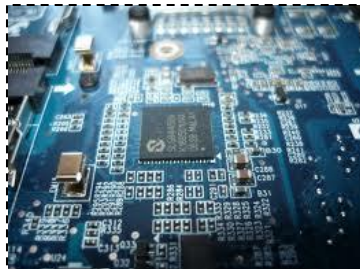
Electronics and Communications
Engineering Department



قسم هندسة الالكترونيات والاتصالات الكهربائية



Satellite



Embedded Systems



Network



Antennas



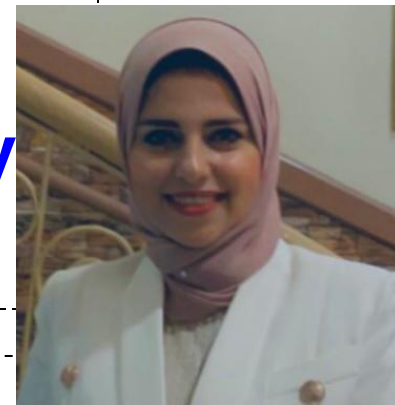
Mobile

Communication Graduates Affiliations

• **Samah Mohammed**

MSc, Research Assistant, Nile University

Mobile: 01024340740



EDUCATION

- 2022 - 2024 Master of Microelectronics System Design (MSD) Faculty of Engineering at Nile University. (GPA:3.78/4.0)
- 2022 Trainee at National Telecommunication Institute (NTI) 1 Month Module AI IoT.
- 2019 Trainee at Information Technology Institute (ITI) 4 month Diploma of Web Development.
- 2012 - 2017 Bachelor of communication Engineering with Excellent Degree Egypt at Pyramids Higher institute for Engineering Technology, (RANK2) (GPA: 3.42/4.0)

LINKS:

1. [in Samah Mohamed](#) |
2. <https://www.researchgate.net/profile/.....>
3. <https://scholar.google.com/citations?user=WKjq2F8AAAAJ&hl=en>
4. <https://ieeexplore.ieee.org/author/37089596545>



AWARDS:

1. Second Placed Best Paper Award at NILES2022 for the paper titled :”Improvement of piezoresistive pressure sensor using zig-zag shaped and PVDF material”.
2. Third Placed Best Paper Award at 2024 International Conference on Future Telecommunications and Artificial Intelligence (IC-FTAI) for the paper titled :”Comparative Study of Heart Disease Classification Based on Traditional and Ensemble Models.”

Samah Mohammed

 Samah Mohamed |  Samah.mahmoud2022@gmail.com

Mobile: 01024340740



SUMMARY

Professional objective enthusiastic, passionate about programming and experienced Teacher Assistant with great communication skills, dedicated to teaching. Seeks to build a career with a highly respected educational institution committed to education and the development of fine, well-mannered, and productive members of society.

WORK EXPERIENCE

Oct. 2023 - present

Nile University, Faculty of Engineering (Egypt, Cairo)

Teaching Assistant at Nile University

Lead sections (Fundamentals of Electromagnetics, Fundamentals of Semiconductor Devices, Electric Circuits, Digital Logic Design, Fundamentals of Electrical Engineering, and Applied Electromagnetics)

Oct. 2022 - Sep.2025

Scada Engineer at Egypton Electricity Transmission Company (Egypt, Cairo)

Samah Mohammed



Oct. 2021 - Oct. 2023

Research Assistant AI Healthcare at Nile University

- **Work on the project "Low-Power Artificial Intelligence Framework for Internet of Things Applications".**

Played a crucial role in the design and implementation of the project's core algorithms and optimization strategies, significantly reducing power consumption while maintaining high AI performance levels.

- **Work on the project " Power Line Communication (PLC)".**

Power Line Communication (PLC): Skilled in using PLC technology for data transmission through existing power cables. Skilled in implementing PLC solutions for various domains, including IoT-based systems.

Missions or tasks realized:

- Mentor for Trainee Students
- Mentor for Graduation Projects
- Acted as a reviewer at an international NILES conference.
- Currently pursuing advanced studies as a senior or postgraduate student.

Samah Mohammed



Sep.2019 – Oct.2021

October 6 University, Faculty of Engineering

Teaching Assistant in Communication Dept. On October 6 University

Missions or tasks realized:

- Lead sections (Math1, Math2, Math3, Math4, Circuit1, Modern Physics, MatLab Introduction to Energy Systems, Microprocessor, and Electrical Machine.)
- Assist instructor in planning and preparation for daily activities, aids instructional efforts of the faculty.
- Present subject matter to students, under the guidance of a faculty staff, utilizing a variety of methods including discussions and role-playing.
- Assist students, individually or in groups, with lesson assignments to present or reinforce learning concepts.

Jan. 2019– Aug. 2019

Banan Agency, WEB Design UI/UX Designer

- Gather and evaluate user requirements in collaboration with product managers and engineers.
- Design graphic user interface elements, like menus, tabs, and widgets.
- Create original graphic designs (e.g. images, sketches, and tables).
- Develop UI mock-ups and prototypes that clearly illustrate how sites function and look like.
- Prepare and present rough drafts to internal teams and key stakeholders.
- Identify and troubleshoot UX problems (e.g. responsiveness).
- Conduct layout adjustments based on user feedback and adhered to style standards on fonts, colors and images.

Samah Mohammed

Dec. 2017– Jan. 2019

Pathfinders Company, Network Engineer

- Maintaining and administering computer networks and related computing environments including systems software, applications software, hardware, and configurations.
- Performing recovery operations and data backups when required.
- Protecting data, software, and hardware by coordinating, planning, and implementing network security measures.
- Troubleshooting, diagnosing, and resolving hardware, software, and other network and system problems.
- Replacing faulty network hardware components when required.
- Maintaining, configuring, and monitoring virus protection software and email applications.
- Monitoring network performance to determine if adjustments need to be made.
- Designing, configuring, and testing networking software, computer hardware, and operating system software.

INTERNSHIPS

- Customer Service, Orange (Jan 2017, Cairo).
- Trainee, AL Fajr Newspaper (Jan 2016, Cairo).
- Trainee, Radio, and television union in Maspero (Jan 2015, Cairo).
- Trainee, the electricity company (Jan 2014, Cairo).



Samah Mohammed



PUBLICATIONS

Journal Papers:

1. Mohamed, Samah, et al. "Energy management for wearable medical devices based on gaining-sharing knowledge algorithm." *Complex Intelligent Systems* (2023) : 1-15.
2. Mohamed, Samah, et al . "Enhanced Glucose Forecasting Using Recurrent Neural Network and Advanced Feature Engineering." *Scientific Reports*. (2025) 15.

Conference Papers:

1. Mohamed, Samah, et al. "An Efficient DMO Task Scheduling Technique for Wearable Biomedical Devices." 2022 International Conference on Microelectronics (ICM). IEEE, 2022.
2. Mohamed, Samah, et al. "SSHC With One Capacitor For Piezoelectric Energy Harvesting." 2022 4th Novel Intelligent and Leading Emerging Sciences Conference (NILES). IEEE, 2022.
3. Ali, Asmaa R., et al. "Improvement of piezoresistive pressure sensor using zig-zag shaped and PVDF material." 2022 4th Novel Intelligent and Leading Emerging Sciences Conference (NILES). IEEE, 2022.
4. Jamal, S., Khaled, S., Kassem, A. M., Eltabey, A., Osama, A., Mohamed, S., Elattar, M. A. (2022, November). In the Identification of Arabic Dialects : A Loss Function Ensemble Learning Based-Approach. International Conference on Model and Data Engineering (pp. 89- 101). Cham : Springer Nature Switzerland.
5. Ismail, E., Ramdan, R., Mohamed, S., Yousri, R., Darweesh, M. S. (2023, July). A Comparative Study of Diabetes Classification Based on Machine Learning. 2023 Intelligent Methods, Systems, and Applications (IMSA) (pp. 598-603). IEEE.

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6. Mohamed, Samah M Tawfik, Rania Elbayoumi, Mahmoud Darweesh, M.. (2023). Efficient UAV-Aided Data Acquisition Based on Transit Search Optimization Algorithm. 184-187. 10.1109/NILES59815.2
7. Mohamed, Samah Gamal, Yomna Soltan, Ahmed Said, Lobna. (2024). Indoor Air Quality Monitoring Systems for Sustainable Medical Rooms and Enhanced Life Quality. 1107-1110. 10.1109/MELECON56669.2024.10608759.
8. Mohamed, Samah Elbayoumi, Mahmoud Soltan, Ahmed Darweesh, M.. (2024). Sustainable Energy-Aware Task Scheduling for Wearable Medical Device Using Flower Pollination Algorithm. 622-627. 10.1109/IMSA61967.2024.10652869.
9. Amer, Sherif Youssef, Omar Zakzouk, Salma Mohamed, Samah Kamel, Ahmed Moussa, Kareem Darweesh, M.. (2024). Lightweight Plant Leaf Classification Based on Transfer Learning: A Comparative Study. 164-169. 10.1109/JAC-ECC64419.2024.11061212.
10. Mohamed, Samah Darweesh, M.. (2024). Comparative Study of Heart Disease Classification Based on Traditional and Ensemble Models. 1-6. 10.1109/IC-FTAI62324.2024.10950066.

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1.  Samah Mohamed |
2.  <https://www.researchgate.net/profile/.....>
3. <https://scholar.google.com/citations?user=WKjq2F8AAAAJ&hl=en>
4. <https://ieeexplore.ieee.org/author/37089596545>



