# Curriculum Vitae


- **Name:** Nihal Hossny Mohammed
- **Title:** Lecturer in Sinai University- Qantara branch (IT)
- **Department:** Information Technology
- **E-mail:** Nihal.hossny@su.edu.eg


## A) Academic Qualifications:

- Bachelor's Degree in: Electrical engineering (Computer Branch) University: Suez Canal Year: 1992

- Master's Degree in Wireless Networking University: Port Said University Year: 2017

- Ph.D. in Usin AI in Wireless Networking University: Port Said Year: 2024

## B) Academic promotions:

- Demonstrator, Date: 2011

- Assistant Lecturer, Date:2018

- Lecturer, Date:1/10 /202

## C) Scientific Merit:

- Google Scholar: https://scholar.google.com/citations?user=qGfiXKUAAAAJ&hl=en&oi=ao

  - Citations:35 h-index:4 i10-index:1

## D) Academic Administrative Experiences:

Lecturer, Information Technology Institute (ITI) Finance Data analysis •

• Predictive analysis in finance

• AI powered budgeting and variance analysis

Lecturer, Arab Academy for Science, Technology and Maritime Transport (Training center)

• Teaching new concepts in business fields using AI.

• Teaching how to use machine learning in the field of media.

• Developing new concepts in digital marketing using

AI. Instructor, Port Said Training Center, Port said University

• Mobile networking training package from 1G to 6G.

• Explain how to enhance network performance using AI and ML.

• Evaluated student progress through regular assessments, providing detailed feedback for improvement and growth in the field of wireless communication.

• Created and designed quizzes, tests and projects to assess student knowledge in using AI and ML in planning new sites and wireless towers.

## E) Scientific Activities

**1: Membership of Professional Organizations and Scientific Societies**

**2: Training Courses/workshops:**

- Lecturer, Information Technology Institute (ITI)
- AI. Instructor, Port Said Training Center, Port said University

**3: Conferences, Seminars and Workshops:**

- International Conference on Advanced Intelligent Systems and Informatics (AISI) proceedings from 2022. In Helnan Portsaid

**4: Teaching Scopes:**

AI, machine learning, data mining algorithms, Data analysis, IoT, and wireless network management. Focusing on improving telecommunication networks through the application of AI.

**5: Scientific Mission**: My mission is to teach how to develop, apply, and integrate Artificial Intelligence with modern wireless communication systems (4G/5G/6G, IoT, smart networks) to solve real-world problems—especially those relevant to Egypt and the Sinai region. This includes:

- AI-driven network optimization
- Intelligent routing, spectrum management, and QoS
- AI for IoT, smart cities, healthcare, and education
- Secure and efficient wireless communication systems

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**6: Patency**: Im working in Patency in the field of 4G and 5G sites planning using AI tools which gives the right dimensions according to available resources.

## F) Scientific Publications:

Last 10 year of published Scientific Papers

**-International journals**

- ADAPTIVE MULTIBAND OPTIMAL FREQUENCY CARRIER SELECTION FRAMEWORK, Scientific Report (In review) 01/03/2025
- A FRAMEWORK FOR ANALYZING 4G/LTE-A REAL DATA USING MACHINE LEARNING ALGORITHMS, IEEE 01/03/2024
- A MACHINE LEARNING-BASED FRAMEWORK FOR EFFICIENT LTE DOWNLINK THROUGHPUT, Springer International Publishing 01/04/2021
- A FRAMEWORK FOR ANALYZING 4G/LTE-A REAL DATA USING MACHINE LEARNING ALGORITHMS, Springer International Publishing 01/08/2020
- MOBILITY MANAGEMENT SCHEME BASED ON SMART BUFFERING FOR VEHICULAR NETWORKS, International Journal of computer networks and applications (IJCNA) 01/02/2017
- PERFORMANCE ANALYSIS OF MOBILITY MANAGEMENT SCHEMES FOR VEHICULAR NETWORKS, International Journal of Intelligent Computing and Information Sciences Ain Shams University, Faculty of Computer and Information Science 01/03/2015

## G) Quality Assurance in Higher Education:

- **Training Attended :**

  a. Making a report
  b. report evaluation

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## H) Skills

**- Language Skills**: Excellent English (Spoken and written)

**- Computer Skills:** Programming Languages & Tools • Python (NumPy, pandas, scikit-learn, PyTorch,..-

- **Teaching & Soft Skills:** • student-centered teaching approaches • assesment & feedback • public speaking • mentoring and supervising students • research communication
- **Mathematics & Theoretical Knowledge** skills: • linear algebra, calculus, probability and statistics • Optimizations techniques • computational complexity
- **Networking skills:** • CCNA • CCNB • Wireless mobile radio networks from 1G to 6G

- **Machine Learning & AI skills**: • Supervised & Unsupervised learning • Deep Learning • Natural Language Processing • Reinforcement Learning • Generative Models
- **Data & Deployment skills : •** Data preprocessing & visulization • Model evaluation & hyperparametar tuning