

## Curriculum Vitae

### Prof. Dr. Rawya Yehia Rizk

Vice President of Post Graduate and Research – Port Said University  
Supervisor of Community Service and Environmental Development Affairs Sector  
Professor of Computer Engineering – Faculty of Engineering –  
Port Said University



#### Personal Data:

**Name:** Rawya Yehia Rizk

**Position:**

- Vice President of Post Graduate and Research, Port Said University.
- Supervisor of Community Service and Environmental Development Affairs Sector
- Professor of Computer and Control Engineering.

**Birth date:** 29-5-1969

**Nationality:** Egyptian

**Address:** Salah Salem & Ahmed Maher Street, Borg Badr, Port Said

**Mobile No.:** +2 0100 9067030

**E-mail:** [r.rizk@eng.psu.edu.eg](mailto:r.rizk@eng.psu.edu.eg), [r.rizk@psu.edu.eg](mailto:r.rizk@psu.edu.eg).

## Educational Qualifications:

- B.Sc. in Computer Engineering, Faculty of Engineering, Suez Canal University, 1991.
- M.Sc. in Computer Engineering, Faculty of Engineering, Suez Canal University, 1996.  
**Title:** "Protocols for Integrated Voice and Data Local Area Networks"
- Ph.D. in Computer Engineering, Faculty of Engineering, Suez Canal University, Egypt, 2001.  
**Title:** "Buffer Allocation Schemes for ATM Networks"

## Academic Positions;

- Teaching Assistant, Electrical Engineering Department, Computer Division, Faculty of Engineering, Suez Canal University, 1991 till 1994.
- Assistant Lecturer, Electrical Engineering Department, Computer Division, Faculty of Engineering, Suez Canal University, from 1994 till 2001.
- Assistant Professor (Lecturer), Electrical Engineering Department, Computer Division, Faculty of Engineering, Suez Canal University, September 2001 till 2011.
- Associate Professor, Electrical Engineering Department, Computer Division, Faculty of Engineering, Port Said University, January 2011 till March 2016.
- Full Professor, Electrical Engineering Department, Computer Division, Faculty of Engineering, Port Said University, March 2016 till now.
- Head of Electrical Engineering Department, Faculty of Engineering, Port Said University, September 2017 till May 2021.
- Executive director of Network Infrastructure Unit, Port Said University, July 2010 till July 2014.
- Chief Information Officer (CIO), Port Said University, July 2014 till May 2021.
- Acting Vice President of Port Said University for Postgraduate Studies and Research, May 2021.
- Vice President of Port Said University for Postgraduate Studies and Research, December 2021, for a period of four years - Republican Decree No. (586) of 2021.

- Acting President of Port Said University by Ministerial Resolution dated 28/7/2024, effective from 1/ 8/ 2024 till 16/ 9/ 2024.
- Supervisor of the Community Service and Environmental Development Affairs Sector, from 1/10/2024 till now.

## **Membership in Scientific Committees, and Works at the National Level:**

### **1. Scientific committees:**

- Arbitrator in the Permanent Scientific Committee for Faculty Promotions, Computer and Systems Engineering Committee No. (120), the Thirteenth (2019-2022) and Fourteenth (2022-2025) sessions.
- Arbitrator in the Permanent Scientific Committee for Faculty Promotions, Committee for Electrical Engineering, Communications, Electronics and Informatics, Council of Centers, Institutes and Research Bodies.

### **2. Works at the National level:**

- A certified auditor in the National Authority for Quality Assurance and Accreditation.
- Certified trainer at the National Center for Training and Leadership Preparation at the Supreme Council of Universities.
- Member of the performance evaluation committee of higher institutes of engineering, technology and applied arts, the Eighth (2019-2020) : Eleventh (2022-2023) sessions.
- Member of the National Committee for Managing the Project for Developing Information Systems and Technology in Higher Education - (Ministerial Resolution No. 459 dated 26/ 2/2015).
- Member of the Supreme Committee of Universities in following up on the research activities of the National Monitoring of Literacy, based on the

approval of the Supreme Council of Universities at its session held on 11/22/2021, the minutes of the Supreme Service for Community Service and Environmental Preparation No. (60) dated 15/ 11/2021.

- Chairman of a subcommittee of the Supreme Committee to follow up on the Egyptian universities' implementation of the National Literacy Eradication Project, specifically to develop a mechanism to classify universities in terms of achievement in the National Literacy Eradication Project, based on the minutes of the meeting of the Supreme Committee to follow up on the Egyptian universities' implementation of the National Literacy Eradication Project, session No. (17) on 29 /11/2021.
- Chairman of a subcommittee of the Supreme Committee to follow up on the Egyptian universities' implementation of the National Illiteracy Eradication Project, specifically establishing a follow-up mechanism for people freed from illiteracy, based on the minutes of the meeting of the Supreme Committee to follow up on the Egyptian Universities' implementation of the National Illiteracy Eradication Project, session No. (20) on 6/ 3/2022.
- Member of the committee to analyze and study the development of MOSAIC to become an international classification and index for universities and research centers in the knowledge economy, affiliated with the Fund for Nurturing Innovators and Geniuses - December 2023.
- Member of the Supreme Advisory Council for Accreditation of Trainers, Licensing and Licensing Training Centers and Recruiting Faculty Members at Universities – December 2023.

### **3. Committees Emanating from the Supreme Council for**

#### **Postgraduate Studies:**

- Member of the committee preparing a study on the hours required in the postgraduate stage to examine the possibility of accelerating postgraduate

studies and research in Egyptian universities, in application of the amendments to Article (79) of the executive regulations of the Universities Organization Law, as well as the system for promoting faculty members in Egyptian universities in this context, based on the Council's approval. The Supreme Council of Universities at its session held on 8/21/2021. Minutes of the meeting of the Supreme Council for Graduate Studies and Research No. (53) dated 11/ 8/2021.

- Member of the committee to prepare and submit a proposal for a charter of ethics for faculty members, based on the approval of the Supreme Council of Universities in its session held on 8/20/2022, and the minutes of the meeting of the Supreme Council for Graduate Studies and Research No. (61) dated 10/ 8/2022.
- Member of the committee for developing a vision for the international classification of Egyptian universities, based on the approval of the Supreme Council of Universities at its session held on 2/25/2023, minutes of the meeting of the Supreme Council for Postgraduate Studies and Research No. (65) dated 16/ 2/2023.
- Member of the committee for compiling and editing all scientific research ethics regulations to be circulated to universities, based on the approval of the Supreme Council of Universities in its session held on 2/25/2023, minutes of the meeting of the Supreme Council for Graduate Studies and Research No. (65) dated 16/ 2/2023.
- Member of the committee studying the appropriate business model for investing in digital content available on the local scientific journals platform hosted by the Egyptian Knowledge Bank, based on the approval of the Supreme Council of Universities at its session held on 4/30/2023. Minutes of the meeting of the Supreme Council for Graduate Studies and Research No. (66) dated 4/ 12/2023.

- Member of the committee to research and study the development of the system of studying foreign students in Egyptian universities, prepare an integrated proposal and establish a specific mechanism that can be implemented, based on the approval of the Supreme Council of Universities in its session held on 8/26/2023. Minutes of the meeting of the Supreme Council for Graduate Studies and Research No. (68) dated 9 /8/2023.
- Chairman of the Committee on Challenges Facing Scientific Research and Publishing in Egyptian Universities and the Map of Egyptian Scientific Research: Indicators, Planning, Challenges, based on the approval of the Supreme Council of Universities in its session held on 11/25/2023, the minutes of the meeting of the Supreme Council for Graduate Studies and Research No. (69) dated 15/ 11/2023.

### **Membership in Scientific Societies:**

- Honorary membership and certificate of excellence in sustainable development from the **Islamic World Council for Disability and Rehabilitation (ICDR)** in the Kingdom of Saudi Arabia.
- **IEEE Senior Member.**
- Senior member of the **International Association of Computer Science and Information Technology (IACSIT).**
- Invited member in the **Institute of Doctors Engineers and Scientists (IDES).**
- Member in **World Academy of Science Engineering and Technology (WASET).**

## **Administrative and Leadership Experiences:**

### **1- Director of Infrastructure for the Port Said University Network and Information Center, July 2010: July 2014:**

It is an important position at the beginning of the establishment of Port Said University from 2010 AD until 2014 AD, during which the infrastructure for the university's network and information center was established and many important projects were implemented, which include the following:

- Establishment of the Port Said University data center
- Installation and maintenance of information networks at all university sites.
- Connecting sites to the main data center.
- Security of the university's information network.
- Raising the speed and efficiency of the Internet at all university sites.

### **2- Executive Director of Information at the University Chief Information Officer (CIO) at Port Said University, July 2014: May 2021:**

It is a vital and important position as it leads the university in development and digital transformation, supervising all projects and tasks related to information technology at the university from 2014 AD until 2021 AD, which includes procurement, budgets, finances, and strategic planning, in addition to many projects at the university, including the following:

- Continuous development of the university's information network and the Port Said University data center
- Continuously maintaining the security of the university's information network.

- Periodically increasing the speed and efficiency of the Internet at all university sites and linking the sites to the main data center.
- Developing technical specifications and committees for opening, closing and receiving envelopes related to the purchase of computers, printers and scientific equipment for Port Said University.
- Developing the university's website, the websites of all colleges in different languages, the websites of university centers and units, and preparing all conference and workshop websites emanating from the university.
- Developing administrative information systems, which specialize in databases of student results and databases of faculty members, support staff, and employees.
- Preparing secured certificates in cooperation with the Identification Documents Industrial Complex.
- Information technology training, which includes training students, faculty members, support staff, and employees on information technology.
- Accreditation of the training center for the basics of digital transformation certificate and certification training, which includes training faculty members and supporting staff.
- E-learning, which includes producing and activating electronic courses.
- Establishing and equipping e-learning platforms and e-book platforms.
- Equipping the electronic testing center and accompanying information centers and linking them to the main information center.
- The digital library and the continuous updating of book and academic theses data and the university's citation detection program.



### **3- Head of the Department of Electrical Engineering - College of Engineering, 2017: May 2021:**

In addition to working as Executive Director of Information, he held the position of Head of the Electrical Engineering Department with its three divisions (electrical power - computers - electronics) at the College of Engineering for a period of four years (2017: 2021 AD) and during this period the following was accomplished:

- Participation in developing the strategic plan for the College of Engineering.
- Supervising the development of research plans for the department with its three divisions (power electricity - computers and control - electronics and communications).
- Supervising the development of the five-year plan to appoint teaching assistants in the department with its three divisions (power electricity - computers and control - electronics and communications).
- Supervising the preparation of (10) laboratories in the Department of Electrical Engineering with its three divisions (power electricity - computers and control - electronics and communications) in the new laboratory building at the College of Engineering.
- Supervising the modernization and transfer of the laboratories of the Electrical Engineering Department with its three divisions (Power Electricity - Computers and Control - Electronics and Communications) from the old buildings in the college to the new laboratory building in the College of Engineering.
- Supervising the repair of all old equipment in the laboratories of the Electrical Engineering Department with its three divisions (power electricity - computers and control - electronics and communications).

- Supervising the preparation of the developed curriculum for the year 2020-2021 for the Department of Electrical Engineering with its three divisions (Power Electricity - Computers and Control - Electronics and Communications) and supervising the development of all curricula and the scientific content of the courses.
- Supervising the preparation of the list of graduate studies with credit hours in the year 2020-2021 for the Department of Electrical Engineering with its three divisions (Power Electricity - Computers and Control - Electronics and Communications) and supervising the development of all curricula and the scientific content of the courses.
- Activating electronic courses affiliated with the university's Center for Production and Activation of Electronic Courses in many of the department's courses.
- Preparing all quality files for the Electrical Engineering Department before accrediting the College of Engineering in the year 2021.
- Communication and cooperation with some bodies and institutions for field training for the department's students (Egyptian Space Agency - Central - Suez Canal Authority).
- Supervising the training of students in entrepreneurship courses organized by the International Labor Organization.

#### **4- Vice President of Port Said University for Postgraduate Studies and Research, May 2021: until now:**

Developing the university's graduate studies and research sector, as it is the vital and pivotal sector within the university, as it is the sector responsible for planning, developing, and achieving the university's international classification, in addition to research activities, conferences, international

relations, scientific journals, libraries, and university centers and units that belong to this sector, which includes the following:

- Participation in several committees emanating from the Supreme Council of Universities to develop the graduate studies and research sector in Egyptian universities from May 2021 until now. These committees included developing a charter of ethics for faculty members and regulations for the ethics of scientific research in all sectors of education, and developing a study of the appropriate business model for investment in Digital content available on the platform of local scientific journals hosted by the Egyptian Knowledge Bank, developing a vision for the international classification of Egyptian universities, researching and studying the development of the system of studying foreign students in Egyptian universities, and examining the possibility of accelerating postgraduate studies and research in Egyptian universities, as well as the system for promoting faculty members in universities. The Egyptian University, Chairman of the Committee for Discussing the Challenges Facing Scientific Research and Publishing in Egyptian Universities, Chairman of the Committee for Studying the Generative Innovation Index, and Chairman of the Referral Pathways Committee for Scientific Production Advanced by Faculty Members in Colleges or Institutes to Obtain the Scientific Title (Assistant Professor/Professor).
- Member of several national committees; the Supreme Committee for Centers for Developing Faculty Capacities at Universities, to approve trainers and training packages and license training centers, and the Committee for Analyzing and Studying the Development of MOSAIC to become an international classification and index for universities and research centers in the knowledge economy in partnership with the Fund for Nurturing Innovators and Genius Persons.

- Issuing an executive plan for studies and research that serve development issues and challenges facing the Suez and Sinai Canal Region 2022-2023.
- Issuing the research plan for Port Said University 2024-2028 emanating from the axes of the National Strategy for Science, Technology and Innovation 2030 of the Ministry of Higher Education and Scientific Research and directing it to serve the issues of the local and international community based on Egypt’s Vision 2030.
- Member of the Board of Directors of the Strategic Planning Center at Port Said University.
- Issuing and updating many rules and regulations regulating postgraduate studies at the university, which included: “General rules regulating postgraduate studies,” “Rules for reducing postgraduate expenses,” “Regulations of the Educational Services Fund - Postgraduate Studies,” and “Unified regulations of scientific journals at Port Said University.”
- Issuing the “Regulation of Scientific Research Ethics for University Education Sectors” at Port Said University, establishing the Supreme Committee for Scientific Research Ethics at the university, and establishing and following up on scientific research ethics committees in some university colleges.
- Issuing the “Intellectual Property Policy” at Port Said University.
- Issuing the “Cybersecurity Policy” at Port Said University.
- Supervising the establishment of electronic testing centers at the university, where the electronic testing center for the medical sector was established, including 570 devices, and the electronic testing center was established for the rest of the sectors, including 1,000 devices.
- Establishing the TICO Office at the university with funding of 1.3 million from the Academy of Scientific Research and Technology,

which is the office responsible for transferring and marketing technology at the university, international relations, and patents.

- Establishing the Measurement and Evaluation Center and two measurement and evaluation units at the College of Commerce and the College of Nursing, with funding of 2 million pounds as part of projects funded by the Project Management Unit of the Ministry of Higher Education and Scientific Research.
- Supervising the establishment of the first Center of Excellence at Port Said University, the Center of Excellence in Membrane Water Desalination Technology for Testing and Characterization, with joint funding between Port Said University and the Science and Technology Authority (STDF) with funding of 45 million pounds, as the Center has an important role in developing the membrane treatment industry in Egypt, through testing Evaluating treatment units, providing training courses, and testing the membranes used, which enhances the sustainability of the water sector and provides pure and healthy water sources.
- Supervising the establishment of a specialized laboratory in the field of the Internet of Things and networks in cooperation with the Ministries of Communications, Higher Education and Scientific Research, with support of 4 million pounds.
- Supervising the establishment of a specialized laboratory in the field of satellites in cooperation with the Egyptian Space Agency.
- Establishing a committee and office for Foreign students at the university, developing the university's expatriate system, and issuing a guide for international students at Port Said University.
- Establishing a sustainable development committee at the university, developing sustainable development at the university, and achieving

university classifications in this field: the British Times Classification and the QS Sustainable Development Classification.

- Establishing the University’s Alumni Committee and creating an alumni forum for each of the University’s colleges.
- Chairing the university’s classification team, as the university advanced in many classifications in the recent period. The university was also included for the first time in many international classifications: the QS Arab Ranking, the THE Ranking for sustainable development, the QS Ranking for sustainable development, and the Shanghai Ranking of subject, and the Arab Ranking which is sourced from the Association of Arab Universities
- Supervising the Government Excellence Award at Port Said University and the University’s Internal Institutional Excellence Award, sponsored by the Ministry of Planning and Economic Development.
- Supervising all centers and units affiliated with the graduate studies and research sector at the university, which includes: the Center for Information Systems and Technology, the Center for Quality Assurance and Accreditation, the Center for Capacity Development of Faculty Members and Leaders, the Center for Measurement and Evaluation, the Center for Strategic Planning, the Center for Innovation and Creativity in Entrepreneurship, the Center University education development, project management unit, and entrepreneurship club.
- Issuing and updating many rules and regulations regulating the university centers affiliated with the university’s graduate studies sector, which included: regulations of the Quality Assurance and Accreditation Center, regulations of the Center for Capacity Development of Faculty Members and Leaders, regulations of the Center for Measurement and

Evaluation, regulations of the Strategic Planning Center, and regulations of the Center for Innovation and Creativity in Entrepreneurship.

- Starting to mechanize the graduate studies and research sector.
- Establishing a bank of devices and laboratories at the university.
- Issuing and following up an executive plan for studies and research that serve development issues and challenges facing the Suez Canal and Sinai region.
- Directing the research plan of Port Said University to serve the issues of the local and international community based on Egypt's Vision 2030.
- Directing the colleges' research plans into applicable research plans to serve the region's issues.
- Supervising the university's participation in many international exhibitions and conferences, such as the Forum for Activities and Events of Egyptian Public Universities to Confront Climate Change, the COP27 Climate Summit, the Cairo International Exhibition for Information and Communications Technology (ICT), and the Cybersecurity and Data Intelligence (CDIS) Exhibition and Conference.
- Representative of the university at the twenty-eighth climate summit, COP28, which was held in the United Arab Emirates.
- Head of the Port Said University delegation during the implementation of a number of Erasmus+ agreements to exchange faculty members, including: Oradea University in Romania and the University of Foggia in Italy.
- Establish many cooperation agreements with international universities and submitted them to the international relations platform of the Ministry of Higher Education and Scientific Research.

- Benefiting from professors and experts who are on scientific missions or missions outside the country during their presence in the corresponding scientific departments.
- Amending many graduate studies regulations and updating them so that all university colleges operate on the credit hour system.
- Supervising e-learning platforms, e-book platforms, and the digital library.
- Supervising the development of regulations for study programs at East Port Said National University (23 programs).
- Supervising the participation of university students in innovation incentive competitions provided by the Science, Technology and Innovation Fund, the Egypt Rally for Entrepreneurship competition organized by the Arab Academy for Technology and Maritime Transport, and the “Youth for Development” 2023 initiative of the Economic Development Forum sponsored by the Ministry of Planning and Economic Development and the Supreme Council of Universities.
- Supervising the holding of many workshops to motivate students to apply for grants for graduation projects provided by the Academy of Scientific Research and Technology, and supervising entrepreneurship camps and idea generation camps.
- Creating many professional graduate programs that suit the needs of the labor market in many of the university’s colleges.
- Creating many interdisciplinary programs that meet the needs of the labor market in many of the university’s colleges.
- Holding many international conferences in cooperation with international universities such as the University of Hamburg, the University of Ostrava and the University of Ghent.



- Holding many international and local conferences in cooperation with universities and regional research institutions, such as Alexandria University, Mansoura University, the Egyptian Chinese University, the National Research Center, Afro-Asian League, and the Water Technology Association.
- Expanding research projects in various sectors at the university and seeking cooperation with foreign bodies accredited in these projects to advance scientific research at the university.
- Providing the libraries of university colleges and the central library with the latest editions of paper and electronic books and references, and providing the necessary financial support to make them accessible to all faculty members and students.
- Developing the university's journals so that all of them (10) journals receive the highest appreciation from the Supreme Council of Universities, in addition to issuing three new scientific journals in English: Port Said Journal of Educational Research (PSJER), Journal of Sustainable Development of Social and Environmental Sciences (JSDSES), and Octahedron Journal of Pharmaceutical Research ( ORD).
- Supervising the establishment of the first Center of Excellence at Port Said University, the Center of Excellence in Membrane Water Desalination Technology for Testing and Characterization, with joint funding between Port Said University and the Science and Technology Authority (STDF) with funding of 45 million pounds, as the Center has an important role in developing the membrane treatment industry in Egypt, through testing Evaluating treatment units, providing training courses, and testing the membranes used, which enhances the sustainability of the water sector and provides pure and healthy water sources.

- Cooperating with the National Institute of Governance to train university students on the principles of sustainable development, training faculty members and women in the university’s administrative staff through the “She for a Digital Future” initiative, and training faculty members, supporting staff, students, and the administrative staff through the “Governance Ambassadors” initiative.
- Coordinator of the “Youth for Development” initiative at Port Said University in the years 2022 and 2023, which is affiliated with the Economic Development Forum, sponsored by the Ministry of Planning and Economic Development and the Supreme Council of Universities, where the university participated with 34 teams of graduate students and students over the two years.

#### **5- Supervising the Community Service and Environmental Development Sector:**

**First: Many tasks were assigned in this vital sector in the period from June 2021 to June 2022, and the following was participated:**

- The university’s representative in the higher committee to follow up on the Egyptian universities’ implementation of the national literacy project for the year 2021-2022.
- Chairman of the committee to develop a mechanism to classify universities in terms of achievement in the national literacy project, under the supervision of the Supreme Committee to follow up on the Egyptian universities’ implementation of the national literacy project.
- Chairman of the committee to establish a mechanism to follow up on those released from illiteracy, under the supervision of the Supreme

Committee to follow up on the Egyptian universities' implementation of the national project to eradicate illiteracy.

- Establishment of the Adult Education Center at Port Said University.
- Supervising the university's illiteracy eradication project and launching the "Port Said University initiative to contribute to Port Said without illiteracy 2025" in cooperation with the General Authority for Adult Education and under the auspices of the Supreme Committee to follow up on the Egyptian universities' implementation of the National Literacy Eradication Project at the Supreme Council of Universities.
- Responsible for the integration of the Canal and Sinai Region for the East Delta Universities Association, which includes the universities of the Suez Canal, Port Said, Suez, and Al-Arish for the year 2022 AD, and developing a comprehensive development convoy plan for all specialties (medical - nursing - awareness - agricultural - veterinary) in the region's universities. The poorest areas of the region were gathered, and the specializations in which each university could participate were gathered. Accordingly, a comprehensive development convoy plan for all specializations was drawn up in places belonging to each university alternately, with a comprehensive convoy being implemented every 3 months.
- Supervising the first comprehensive development convoy for the region (medical - nursing - awareness - agricultural - veterinary) to the village of (Umm Habib) in Al-Qassasin, Ismailia Governorate, in August 2022.

**Second: Supervisor of the Environment Affairs and Community Service Sector, from 1/8/2024 as Acting President of the University, then Supervisor of the Sector, in addition to working as Vice President**

**for Postgraduate Studies and Research, from 1/10/2024 until now, and the following was done:**

- Directing, supervising and following up on the university's activities in the presidential initiative "A New Beginning for Human Building", which included awareness activities, comprehensive convoys, blood donation campaigns, literacy convoys and the Egyptian Industrial Initiative.
- Developing a plan to develop units with a special character at the university.
- Developing an executive plan for community activities at the university for the academic year 2024/2025.
- Developing an executive plan for the university's literacy project for the academic year 2024/2025.
- Supervising the establishment of the Family Development Center at Port Said University.
- Supervising the establishment of the Drug Information Center at Port Said University.
- Supervising the establishment of a training pharmacy at Port Said University.

**6- Acting President of Port Said University, August 2024: September 2024:**

The work of the university presidency was assigned from August 2024 to September 2024, and the following were done:

- Supervising all existing projects and facilities at the university, represented by: Buildings of the Faculties of Commerce - Early Childhood Education - Arts - Law - Educational and Administrative

- Building at the University Headquarters - Swimming Pool at the Faculty of Physical Education - Ports Laboratory at the Faculty of Engineering.
- Supervising the preparation of the university hospital for the start-up process.
  - Supervising the work of an electronic application for medical examination for all new students at the university with the operation of the university hospital in the medical examination.
  - Supervising tenders for the supply of food and supplies for university cities and college supplies for the academic year 2024/2025.
  - Proposing new projects: The Faculty of Law building (Second phase) - The fence and surface of the Faculty of Science.
  - Establishing the International Students Office at the university.
  - Establishing a Human Rights Unit at the University.
  - Supervising the University’s participation in the “Bidaya” presidential initiative, through the organization of several comprehensive medical convoys to the neighboring villages of Port Said and through the “Egypt Industrial Program”.

### **Fields of University Work:**

#### **1. Working in committees and boards of directors of centers at the university:**

- Member of the Port Said University Council from 2014 until now.
- Member of the Council of the Higher Institute of Management and Computer Science - Port Said University for a period of two years by Resolution No. (433) dated 4/5/2016.

- Member of the team preparing the strategic plan for Port Said University 2016/2021 AD by Resolution No. (513) dated 4/28/2016.
- Member of the University Classification Committee to include the university in the international classification by Resolution No. (1544) dated 11/14/2017.
- Member of the committee studying the Port Said University awards list by decision of the University Council at its session No. (150) on 11/30/2020.
- Member of the Board of Directors of the Measurement and Evaluation Center at Port Said University, pursuant to Resolution No. (1436) dated 12/2/2020.
- Member of the Implementation Committee of the National Anti-Corruption Strategy by Resolution No. (1460) dated 12/7/2020.
- Chairman of the Scientific Research Committee at Port Said University, by Resolution No. (702) dated 6/17/2021.
- Member in the formation of the Board of Directors of Non-Traditional Education - at Port Said University, by Resolution No. (738) dated 6/30/2021.
- Chairman of the Human Resources Committee at Port Said University, by Resolution No. (804) dated 7/7/2021.
- Member of the formation of the Sustainable Development Committee at Port Said University by Resolution No. (1011) dated 8/19/2021.
- Member of the formation of the Supreme Committee to manage the vaccination campaign against the Corona virus at Port Said University by Resolution No. (1023) dated 8/23/2021.
- Member of the formation of the Faculty Grievances Committee at Port Said University by Resolution No. (1281) dated 10/6/2021.

- Member of the University Classification Committee to include the university in the international classification by Resolution No. (62) dated 11/18/2021.
- Member of the formation of the Government Excellence Award Committee by Resolution No. (1554) dated 12/5/2021.
- Member of the formation of a committee for graduates at Port Said University by Resolution No. (1660) dated 12/22/2021.
- Member of the formation of the Foreign students Committee at Port Said University by Resolution No. (1661) dated 12/22/2021.
- Member in the formation of the Scientific Awards Council of Port Said University by Resolution No. (151) dated 2/10/2022.
- Chairman of the Disciplinary Board of Teaching Assistants and Assistant Teachers at Port Said University for the academic year 2021/2022, by Resolution No. (160) dated 2/14/2022.
- Member of the formation of the National Anti-Corruption Strategy Implementation Committee pursuant to Resolution No. (226) dated 3/7/2022.
- Vice Chairman of the Board of Directors of the Adult Education Center - Port Said University (a unit of a special nature) as of 3/14/2022 for a period of three years by Resolution No. (257) dated 3/14/2022.
- Member of the formation of the University Classification Committee to follow up and activate the international classification of Port Said University by Resolution No. (410) dated 5/15/2022.
- Chairman of the Faculty Grievances Committee - Port Said University, by Resolution No. (1086) dated 8/31/2022.

- Member of the Board of Directors of the Strategic Planning Center at Port Said University, effective September 20, 2022, for a period of three years, by Resolution No. (1207) dated September 20, 2022.
- Chairman of the committee to review all necessary procedures for collecting fees from international students and reviewing payment receipts for students by Resolution No. (1730) dated 12/12/2022.
- Chairman of the Faculty Grievances Committee at Port Said University, pursuant to Resolution No. (1807) dated 12/21/2022.
- Chairman of the Disciplinary Board of Teaching Assistants and Assistant Teachers at Port Said University for the academic year 2022/2023, by Resolution No. (46) dated 1/5/2023.
- Chairman of the Scientific Research Committee by Resolution No. (51) dated 1/5/2023.
- Chairman of the Board of Directors of Quality Assurance - Port Said University, by Resolution No. (135) dated 1/24/2023.
- Member of the committee for reviewing the internal regulations for the bachelor's degree with the credit hour system for the Faculty of Management Technology and Information Systems, by University Council Resolution No. (182) dated 3/28/2023.
- Member in the formation of the Scientific Awards Council of Port Said University by Resolution (482) dated 3/29/2023.
- Chairman of the Scientific Research Committee at Port Said University by Resolution No. (1240) dated 9/4/2023.
- Vice Chairman of the Board of Directors of the Professional Diploma Program in Clinical Coding and Medical Recording, pursuant to Resolution No. (1643) dated 11/5/2023.



- Vice Chairman of the Board of Directors of the Geomatics and Geographic Information Systems Diploma Program, pursuant to Resolution No. (1644) dated 11/5/2023.
- Member in the formation of the Board of Directors of Non-Traditional Education at Port Said University, by Resolution No. (1645) dated 11/5/2023.
- Deputy in the formation of the Committee for Equal Opportunities and Women’s Empowerment by Resolution (1713) dated 11/18/2023.
- Chairman of the Disciplinary Board of Teaching Assistants and Assistant Teachers at Port Said University for the academic year 2023/2024, by Resolution No. (1715) dated 11/20/2023.
- Chairman of the Supreme Committee for Scientific Research Ethics at Port Said University, by Resolution No. (1866) dated 12/18/2023.
- Deputy of the Foreign students Committee by Resolution (171) dated 6/2/2024.
- Chairman of the central committee at the level of Port Said University concerned with selecting the presidents, deputies, secretaries, and members of university education sector committees for the 2024-2027 session in accordance with the nomination criteria approved by the Supreme Council of Universities by Resolution (900) dated 7/3/2024.
- Member of the Academic Council of East Port Said Private University by Resolution (1) dated 2/9/2024.
- Chairman of the Board of Directors of the University’s Educational Services Fund, by Resolution No. (1098) dated 10/14/2023.

**2. Working in the units and boards of directors of the centers of the Faculty of Engineering:**

- Director of Cisco Academy, Faculty of Engineering, Suez Canal University  
2008 : 2010.
- Director of Cisco Academy, Faculty of Engineering, Port Said University  
2010 : 2021.
- Member of the Board of Directors of the Software Production and Marketing  
Unit at the Faculty of Engineering, Port Said University, pursuant to  
Resolution No. (259) dated 2/6/2010.
- Member of the Board of Directors of the Software Production and Marketing  
Unit at the Faculty of Engineering, Port Said University, by Resolution No.  
(1645) dated 12/3/2017.
- Member of the Board of Directors of the Software Production and Marketing  
Unit at the Faculty of Engineering, Port Said University, by Resolution No.  
(259) dated 10/26/2020.
- Member of the Board of Directors of the Crises and Disasters Unit at the  
Faculty of Engineering in Port Said, pursuant to Resolution No. (58) dated  
1/18/2021.

**3. The Faculty of Engineering Council, the Department Council, and  
the committees of the Faculty Council:**

- Member of the Faculty of Engineering Council in the year 2014-2015 for  
assistant professors.
- Member of the Faculty of Engineering Council in the year 2016-2017 for  
the professors of the Department of Electrical Engineering.
- Member of the Faculty of Engineering Council in the years 2017-2018 until  
2020-2021 as head of the Electrical Engineering Department.
- Member of the Electrical Engineering Department Council in the years  
2002-2003, 2005-2006, and from 2011 until now.

- Chairman of the Library Committee at the Faculty of Engineering in the years 2017-2018, 2018-2019, and 2020-2021.
- Member of the Student Affairs Committee at the Faculty of Engineering in the year 2002-2003.
- Member of the Graduate Studies Committee at the Faculty of Engineering in the years 2006-2007 and 2019-2020.
- Member of the Community Service and Environmental Affairs Committee at the Faculty of Engineering in the years 2010-2011 and 2015-2016.

### **Training Programs Obtained:**

#### **1. Training programs obtained from external organizations:**

- “CCNA Exploration: Network Fundamentals” program – 7/6/2010.
- “Training of Entrepreneurship Trainers (TET)” program - International Labor Organization 2012.
- “Women Entrepreneurs Moving Forward” program - within the framework of the “Decent Jobs for Egypt’s Youth” project - International Labor Organization - 2013.
- “Institutional Self-Evaluation for Higher Education Institutions” Program - The National Authority for Educational Quality Assurance and Accreditation – March 2013.
- “Remark Office 10 Electronic Correction Program” – Remark Company (Middle East & North Africa) – 10/1/2019 to 12/9/2019.
- The TOGAF® Standard Program - Supreme Council of Universities - July 2020.
- “COBIT Standard (Control Objectives for Information and Related Technology)” program - Supreme Council of Universities - October 2020.

- “University Ranking Strategy” workshop - Web of Science, Clarivate - Egyptian Knowledge Bank - 6/21/2021.
- “Research Grants: Spotting - Positioning - Drafting” workshop - Web of Science, Clarivate - Egyptian Knowledge Bank - 6/24/2021.
- “Publication Ethics and Research Misconduct” workshop – Web of Science, Clarivate – Egyptian Knowledge Bank – 6/28/2021.
- “Port Said University Ranking Strategy – Part 2” workshop – Web of Science, Clarivate – Egyptian Knowledge Bank – 6/30/2021.
- “Get Connected” program - Cisco Academy in cooperation with the National Governance Institute - 11/8/2022.
- “International Standard Specification for Energy Management System ISO50001-2018” program - NI Consulting Academy in cooperation with the Ministry of Planning and Economic Development - 11/16/2022 to 2/15/2023.
- “International Standard Specification for Governance Management Systems ISO37000” program - NI Consulting Academy in cooperation with the Ministry of Planning and Economic Development - 12/1/2022 to 2/1/2023.
- “International Standard Specification for Quality Management Systems ISO9001-2015” program - NI Consulting Academy in cooperation with the Ministry of Planning and Economic Development - 12/11/2022 to 1/22/2023.
- “Strategic Planning for Colleges and Institutes of Higher Education” program - The National Authority for Educational Quality Assurance and Accreditation - 7/9/2023 to 7/10/2023.
- “Effective teaching and learning strategies for colleges and institutes of higher education” program - The National Authority for Educational Quality Assurance and Accreditation - 7/30/2023 to 7/31/2023.

- “Examination and Student Evaluation Systems for Colleges and Institutes of Higher Education” program - The National Authority for Educational Quality Assurance and Accreditation - 8/6/2023 to 8/7/2023.
- “External review of colleges and institutes of higher education” program - the National Authority for Educational Quality Assurance and Accreditation – 8/14/2023 to 8/16/2023.
- “Self-Evaluation of Colleges and Institutes of Higher Education” program - The National Authority for Educational Quality Assurance and Accreditation - 11/21/2023 to 11/23/2023.
- “Description of programs and courses for colleges and institutes of higher education” program - The National Authority for Educational Quality Assurance and Accreditation - 11/28/2023 to 11/30/2023.
- “Evaluation and Quality Assurance of University Management” - DAAD - 2/5/2024 to 2/6/2024.

## **2. Training programs obtained from Port Said University:**

- “Professional Ethics and Ethics” Program – 2005.
- “Effective Presentation Skills” program – 2005.
- “Effective Communication Skills” Program – 2005.
- “Lifelong Learning” Program – 2006.
- “Credit Hours” Program – 2006.
- “Teaching Evaluation” Program – 2006.
- “Strategic Planning” program – 9/22/2013 to 9/24/2013.
- “EndNote” program – 3/15/2015 to 3/17/2015.
- “Graphics Adobe Photoshop” program – 3/29/2015 to 4/1/2015.
- “Research Team Management” program – 8/18/2015 to 8/19/2015.
- “Competitive Research Projects” program – 8/23/2015 to 8/24/2015.

## Teaching Work Areas:

### **1. Teaching, graduation projects, and examination work:**

- Courses taught at the undergraduate and graduate levels: wireless networks, computer networks, parallel processors, computer security, logical circuits, artificial intelligence, databases, programming, numerical analysis, e-commerce: at the Faculty of Engineering, Suez Canal University for the period from 2002 to 2010, and at the Faculty of Engineering, Port Said University, for the period from 2010 until now.
- Supervising graduation projects for students of the Bachelor of Electrical Engineering - Computers and Control Division.
- Carrying out control and monitoring work and heading the control from 2001 to 2021.

### **2. Developing the teaching method in the subjects taught:**

- Cisco’s CCNA curriculum has been activated in the “Computer Networks” subject, which provides the student with a certificate accredited by the company for free while studying the course, from 2009 until now.
- An electronic course affiliated with the University’s Center for Production and Activation of Electronic Courses in the subject “Logical Circuits” was activated from 2013 to 2020.

### **3. Participation in student training:**

- Training in entrepreneurship courses for university students in partnership with the International Labor Organization.
- Training in information technology courses for university students.
- Supervising the summer field training work for students of the Electrical Engineering Department - Computers and Control Division.

## Research Work Areas:

### Summary Table for the Different Activities in the Resume

Activity	Counts		
		Book Chapters	Journals
International Publications	11	53	50
	Total 114		
Google Scholar	i10-index	H-index	Citations
	30	18	1316
Scopus Information	No. of Pub.	H-index	Citations
	72	14	746
Scival Information	Scholarly Output	H-index	Citations
	49	14	650
Thesis Supervision	Total	MSc.	Ph.D.
	45	25	20
Reviewer and Examiner for Ph.D. and MSc.	Total	MSc.	Ph.D.
	53	31	22
International and local Projects	No.	Amount of Fund	
	6	2.280.000 (LE) 60,000 \$ 27,000 (GBP)	
Book Editor	3		
Number of Verified Reviews in Publons (Web of science)	94		

### Basic Data in Local and International Databases

Homepage:	<a href="http://staff.psu.edu.eg/rawyarizk">http://staff.psu.edu.eg/rawyarizk</a>
Scopus:	<a href="https://www.scopus.com/authid/detail.uri?authorId=26649135100">https://www.scopus.com/authid/detail.uri?authorId=26649135100</a>
Scival:	<a href="https://www.scival.com/overview/summary?uri=Customer%2F706325%2FResearcher%2F6189905">https://www.scival.com/overview/summary?uri=Customer%2F706325%2FResearcher%2F6189905</a>
ORCID No.:	0000-0003-3448-0498
Scopus ID:	26649135100

## 1. Domain of Research

Computer networking, including mobile networking, Cloud computing, Internet of Things (IoT), Wireless Sensor Networks (WSNs), Asynchronous Transfer Mode (ATM) Networks, High Speed Computer Networks, Internet Protocol (IP), Ad hoc Networks, Mesh Networks, WiMAX Networks, and Wireless Communication, and the fields of Artificial Intelligence (AI) including machine learning and deep learning.

## 2. International and Local Projects

### • International Research Projects:

- **Project Name:** Development of a Machine Language Model – Based on Artificial Intelligence – to Predict and/or Detect Colon Cancer, Its Migration or Resistance to Treatment: A Longitudinal Study Based on Proteins as Multiple Markers
  - Funding Authority: The Scientific Cooperation Council of the League of Arab States and the Science, Technology and Innovation Funding Authority (STDF)
  - Partners: Zewail University, Port Said University, University of Sharjah, King Faisal University
  - Budget: \$60,000
  - Duration: 1 year (2024: 2025)
  
- **Project Name:** Trans-National Master Programme in Sustainable Energy and Water Resources in Marine Environment
  - Funding Authority: British Council
  - Partners: University of Strathclyde, Port Said University
  - Budget: 27,000 Pound Sterling (GBP)
  - Duration: 1 year (2024: 2025)



- **Project Name:** Biodegradable supercapacitor based on porous carbon grafted with nitrogen, sulfur and nanoscale starch from polyurethane sponge by waste recycling
  - Funding Authority: Egyptian-French Cooperation Program (Imhotep), Academy of Scientific Research
  - Partners: National Research Centre, Mansoura University, Research Institute for Advanced Materials Technology and Mineral Resources, Chemical Industries Research Institute, Port Said University
  - Budget of the Egyptian side: 300,000 EGP
  - Duration: 2 years (2023: 2025)

- **Local Research Projects:**

- **Project Name:** Smart Solar Desalination System for Maximizing Water Productivity under Climate Change Using Artificial Intelligence
  - Funding Authority: Science and Technology Development Fund (STDF)
  - Project Number: 46931
  - Partners: Port Said University (PI), Helwan University, Heliopolis University
  - Budget: 1,980,000 EGP
  - Duration: 2 years (2022: 2024)

- **Mobility Projects (Erasmus+ Projects)**

- **Staff mobility for Administration and training to/from Romania:**
  - **Dates of mobility:** 28/05/2023 – 04/06/2023
  - **Countries of mobility:**
    - **Sending organization:** Port Said University
    - **City:** Port Said
    - **Country:** Egypt
    - **Receiving organization:** Oradea University
    - **City:** Oradea
    - **Country:** Romania
- **Staff mobility for Administration and training to/from Italy:**
  - **Dates of mobility:** 23/07/2023 – 27/07/2023
  - **Countries of mobility:**

- **Sending organization:** Port Said University
- **City:** Port Said
- **Country:** Egypt
- **Receiving organization:** Foggia University
- **City:** Foggia
- **Country:** Italy

### 3. Book Editor

➤ **Proceedings of the 8<sup>th</sup> International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)**

**Publisher:** Springer International Publishing AG

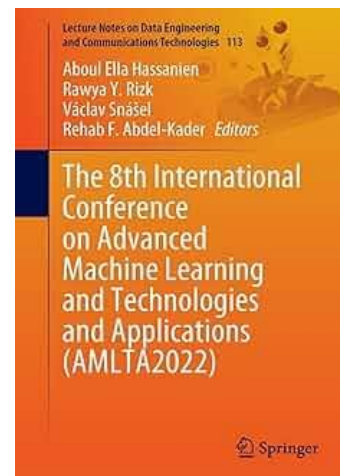
ISBN : 978-3-031-03917-1

**Publication Date:** Apr. 17th, 2022

**Book Series:** Lecture Notes on Data Engineering and Communications Technologies (LNDECT, volume 113)

**Conference series link(s):** [AMLTA: International Conference on Advanced Machine Learning Technologies and Applications](#)

**Volume Editors:** Aboul Ella Hassanien, Rawya Y. Rizk, Václav Snášel, and Rehab F. Abdel-Kader



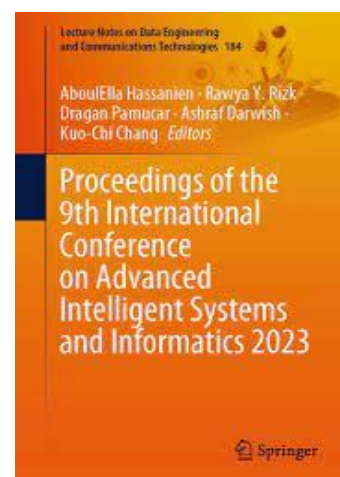
➤ **Proceedings of the 9<sup>th</sup> International Conference on Advanced Intelligent Systems and Informatics (AISIT2023)**

**Publisher:** Springer International Publishing AG

**Publication Date:** 2023

**Book Series:** Lecture Notes on Data Engineering and Communications Technologies (LNDECT, volume 184)

**Volume Editors:** Aboul Ella Hassanien, Rawya Y. Rizk, Dragan Pamucar, Ashraf Darwish, and Kuo-Chi Chang



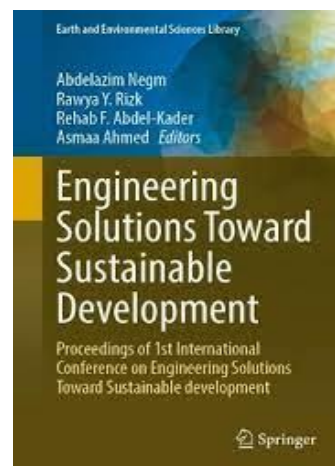
➤ **Engineering Solutions Toward Sustainable Development - Proceedings of 1<sup>st</sup> International Conference on Engineering Solutions Toward Sustainable Development**

**Publisher:** Springer International Publishing AG

**Publication Date:** 2023

**Book Series:** Springer Proceedings on Earth and Environmental Sciences

**Volume Editors:** Abdelazim Negm, Rawya Rizk, Rehab Abdel-Kader, and Asmaa Ahmed



#### **4. Activities in International Journals**

- Editorial board member in “**Journal of Electrical Systems and Information Technology (JESIT)**”, Springer.
- Reviewer in “**IEEE Intelligent Transportation Systems Transactions**” Journal.
- Reviewer in “**IET Communications**” Journal.
- Reviewer in “**IET Wireless Sensor Systems**” Journal.
- Reviewer in “**International Journal of Communication Systems**”, Wiley.
- Reviewer in “**Journal of Network and Computer Applications**”, Elsevier.
- Reviewer in “**Computers and Electrical Engineering**”, Elsevier.
- Reviewer in “**Computers Communications**”, Elsevier.
- Reviewer in “**Journal of King Saud University - Computer and Information Sciences**”, Elsevier.
- Reviewer in “**Telecommunication Systems (TELS)**”, Springer.
- Reviewer in “**International Journal of Automation and Computing**”, Springer.

- Reviewer in “**International Journal of Distributed Sensor Networks**”, SAGE.
- Reviewer in “**Journal of Computer Networks and Communications**”, Hindawi.
- Reviewer in “**Electronics Letters**”, IET.
- Reviewer in “**International Journal of Ad Hoc and Ubiquitous Computing (IAHUC)**”, Inderscience.
- Reviewer in “**International Journal of Trust Management in Computing and Communications (IJTMCC)**”, Inderscience.
- Reviewer in “**KSII Transactions on Internet and Information Systems**” Journal.
- Reviewer in “**Cryptologia**”, Taylor & Francis.
- Reviewer in “**International Journal of Advanced Computer Science and Applications (IJACSA)**”, Science and Information (SAI) Organization.
- Reviewer and Editorial board member in “**International Journal of Communication Systems and Networks**”, Science & Engineering Research Support Society (SERSC).
- Reviewer and Editorial board member in “**International Journal of Communication Technology for Social Networks**”, Science & Engineering Research Support Society (SERSC).
- Reviewer in “**International Journal of Communication Systems and Networks Technologies (IJCSNT)**”
- Reviewer in “**Ad Hoc Networks**”
- Reviewer in “**Indian Journal of Science and Technology**” P-ISSN 0974-6846 E-ISSN 0974-5645.
- Reviewer in “**Ain Shams Engineering Journal (ASEJ)**”, Elsevier, ISSN: 2090-4479.
- Reviewer in “**MEJ. Mansoura Engineering Journal**”, ISSN: 1110-0923.
- Reviewer in “**Port-Said Engineering Research Journal (PSERJ)**” ISSN 1110-6603.

## **5. Activities in International Conferences**

- Member in “Local Organizing Committee”, “**The 8th Symposium on Marine Propulsors (smp`24)**”, under auspices of Port Said University and Hamburg University, Hurgada, Egypt, March 17–21, 2024.
- Conference Chair, "**International conference of green Sciences**" under auspices of Port Said University, Egypt, September 24-26, 2023.
- Conference Chair, “**The 9<sup>th</sup> International Conference on Advanced Intelligent Systems and Informatics, AISI2023**”, under auspices of Port Said University and Ostrava University, Egypt, September 20-22, 2023.
- Conference Honorary Chair, “**The 4<sup>th</sup> International Conference on Membrane Technology and Its Applications**”, under auspices of Port Said University, National Research Center, and Water Technology Association, Port Said, Egypt, August 28–29, 2023.
- Conference Chair, “**1<sup>st</sup> International Conference on Engineering Solutions Toward Sustainable Development (ESSD2023)**”, under auspices of Port Said University, Egypt, May 02-03, 2023.
- Member in “Organizing Committee” of “**The International Conference on the Works of the Italian Orientalist Giuseppe Scattolin**” under auspices of Port Said University and **Catholic University of Milan**, Italia, May 17, 2023.
- Member in “Organizing Committee” of “**23<sup>rd</sup> International Water Technology Conference IWTC 2023**”, under auspices of Port Said University, and Water Technology Association, Port Said, Egypt, March 09–10, 2023.
- Member in “International Advisory Board”, “**The 3<sup>rd</sup> International Conference on Artificial Intelligence and Computer Vision (AICV2023)**” Marrakesh, Morocco, March 05–07, 2023.

- Steering Committee Member, “**2<sup>nd</sup> MENA Regional Engineering Education Conference 2023 (MENAREE)**”, Dubai, UAE, March 01–02, 2023.
- Conference Chair, “**The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)**”, under auspices of Port Said University and Ostrava University, Egypt, May 07-08, 2022.
- Member in “Program Committee” of “**The International Conference on Decision Aid Sciences and Applications (DASA' 20)**”, Kingdom of Bahrain, November, 2020.
- Member in “Program Committee” of “**The 15<sup>th</sup> International Conference on Bio-Inspired Computing: Theories and Application, 2020 (BIC-TA 2020)**”, Qingdao, China, October 23-25, 2020.
- Reviewer in “**22nd International Conference on Advanced Communications Technology (ICACT 2020)**” Phoenix Park, PyeongChang, Korea, 2020.
- Member in “Program Committee” of “**The 14<sup>th</sup> International Conference on Bio-Inspired Computing: Theories and Application, 2019 (BIC-TA 2019)**”, Zhengzhou, China, November 22-25, 2019.
- Reviewer in “**IEEE International Conference on Computer Engineering and Systems (ICCES 2019)**” Cairo, Egypt, December 2019.
- Reviewer in “**21st International Conference on Advanced Communications Technology (ICACT 2019)**” Phoenix Park, PyeongChang, Korea, 2019.
- Member in “Program Committee” of “**The 13<sup>th</sup> International Conference on Bio-Inspired Computing: Theories and Application, 2018 (BIC-TA 2018)**”, Beijing, China, November 2-4, 2018.

- Member in the “Technical Program Committee” of “**International Conference on Artificial Intelligence and Computer Engineering (AICE-2017)**”, Xiamen, China, June 23-25, 2017.
- Member in the “Technical Program Committee” of “**19th IEEE International Conference on Advanced Communications Technology (ICTACT-2017)**”, Phoenix Park, PyeongChang, Korea, February 19-22, 2017.
- Member in the “International Technical Committee” of “**International Conference on Computer Science and Communication Technology (CSCT-2016)**”, Beijing, China, December 30-31, 2016.
- Member in “Editorial Committee” of “**International Workshop on for Social Networks (CTSN-2015)**”, Korea, December 16-19, 2015.
- Member in “Technical Program Committee” of “**The International Conference on Communication Systems and Network Technologies (CSNT-2015)**”, India, April 4-6, 2015.
- Member in “Program Committee” of “**The 9<sup>th</sup> International Conference on Bio-Inspired Computing: Theories and Application, 2014 (BIC-TA 2014)**”, Wuhan, China, October 16-19, 2014.
- Member in “Technical Program Committee” of “**The International Conference on Machine Intelligence Research and Advancement (ICMIRA 2013)**”, India, December 21-23, 2013.
- Member in “Program Committees and Reviewers” of “**5<sup>th</sup> International Conference on Computer Science and Information Technology (ICCSIT 2012)**”, Hong Kong, December 29-30, 2012.
- Member in “Technical Program Committee” of “**Seventh International Conference on Bio-Inspired Computing: Theories and Application, 2012 (BIC-TA 2012)**”, Gwalior, India, December 14-16, 2012.
- Member in “Technical Program Committee” of “**The International Conference on Computational Intelligence and Communication Networks (CICN 2012)**”, Mathura, India, November 03-05, 2012.



- Member in “International Program Committee” of “**The International Conference on Communication Systems and Network Technologies (CSNT 2012)**”, Rajkot, India, May 11-13, 2012.
- Member in “Program Committee” of “**International Conference on Soft Computing for Problem Solving (SocPros 2011)**”, Springer, Roorkee, India, December 20-22, 2011.
- Member in the “International Program Committee” of “**World Congress on Information and Communication Technologies (WICT)**”, Mumbai, India, December 11-14, 2011.
- Member in “Technical Program Committee” of “**The International Conference on Computational Intelligence and Communication Networks (CICN 2011)**”, Gwalior, India, October 07-09, 2011.
- Member in “Program Committees and Reviewers” of “**4<sup>th</sup> IEEE International Conference on Computer Science and Information Technology (IEEE ICCSIT 2011)**”, Chengdu, China, June 10-12, 2011.
- Member in “Technical Program Committee” of “**The International Conference on Computational Intelligence Communication Networks (CICN 2010)**”, India, November 26-28, 2010.
- Session Chair in “**2009 IEEE International Conference on Image Processing (ICTP’09)**”, Egypt, 2009.
- Member in “Organizing Committee” of “**The Tenth International Middle East Power Systems Conference (MEPCON’2005)**”, Egypt 2005.

#### **6. Supervising International Conferences Held under the Auspices of Port Said University:**

- “**The 8th Symposium on Marine Propulsors (smp`24)**”, under auspices of Port Said University and Hamburg University, Hurgada, Egypt, March 17–21, 2024.



- **"International conference of green Sciences"** under auspices of Port Said University, Egypt, 24-26 September, 2023.
- **"The 9<sup>th</sup> International Conference on Advanced Intelligent Systems and Informatics, AISI2023"**, under auspices of Port Said University and Ostrava University, Egypt, September 20–22, 2023.
- **"The 4<sup>th</sup> International Conference on Membrane Technology and Its Applications"**, under auspices of Port Said University, National Research Center, and Water Technology Association, Port Said, Egypt, August 28–29, 2023.
- **"1<sup>st</sup> International Conference on Engineering Solutions Toward Sustainable Development (ESSD2023)"**, under auspices of Port Said University, Egypt, 02-03 May 2023.
- **"The International Conference on the Works of the Italian Orientalist Giuseppe Scattolin"** under auspices of Port Said University and **Catholic University of Milan**, Italia, 17 May 2023.
- **"23<sup>rd</sup> International Water Technology Conference IWTC 2023"**, under auspices of Port Said University, and Water Technology Association, Port Said, Egypt, March 09–10, 2023.
- **"The 8<sup>th</sup> International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)"**, under auspices of Port Said University and Ostrava University, Egypt, 07-08 May 2022.

## **7. Supervising Regional & International Events in which the University Participated**

- CDIS Cybersecurity and Data Intelligence Systems – Cairo – May 2023
- Cairo ICT – Cairo – November 2022
- COP 27 – Sharm El-Sheikh – Egypt – November 2022

- Forum of Activities and Events of Egyptian Governmental Universities to Confront Climate Changes – Tolip Resort El Galala Hills – September 2022
- COP 28 – Dubai – UAE – December 2023

## **8. Masters' Supervision**

- 1- **Heba Nashat:** “Mobility Management Protocols for IP Networks,” awarded May 2006, Suez Canal University.
- 2- **Asmaa Refaat:** “Traffic Analysis for Bluetooth Personal Area Network,” awarded August 2007, Suez Canal University
- 3- **Fify Farouk:** “Wireless Asynchronous Transfer Mode Handoff Schemes,” awarded October 2008, Suez Canal University.
- 4- **Walaa Saber:** “Packets Discard Schemes for Transmission Control Protocol over Asynchronous Transfer Mode,” awarded October 2008, Suez Canal University.
- 5- **Amera Abdel Maksoud:** “Multirobot System Control using Wireless Network,” awarded September 2009, Suez Canal University.
- 6- **Radwa Yousef:** “Routing Protocols for Mobile Ad Hoc Network,” awarded December 2009, Suez Canal University.
- 7- **Aliaa Almaghaby:** “Quality of Service in Multi-Protocol Label Switching Networks,” awarded July 2010, Suez Canal University.
- 8- **Hala Elhadidy:** “Routing Algorithms for Wireless Sensor Networks,” awarded May 2011, Port Said University.
- 9- **Ahmed Salama:** “Digital image watermarking,” awarded August 2012, Port Said University.”
- 10- **Marwa Gamal:** “Routing Protocols in Wireless Mesh Networks,” awarded October 2012, Port Said University.
- 11- **Sara Abo Hashesh:** “Virtual Multiple-Input Multiple-Output Communications for Wireless Sensor networks,” awarded November 2012, Port Said University.

- 12- **Ghada Sandob:** “Opportunistic Scheduling for Mobile WiMAX Systems,” awarded May 2013, Port Said University.
- 13- **Yasmin Alkady:** “Security Protocols for Wireless Networks,” awarded March 2014, Port Said University.
- 14- **Abd Alla Mosa:** “Robust Template Matching for Grayscale Images” awarded April 2016, Port Said University.
- 15- **Ahmed Salah:** “Routing in Cognitive Radio Networks” awarded January 2018, Port Said University.
- 16- **Walaa Hashem:** “Load Balancing of Virtual Machines in Cloud Computing” awarded March 2018, Port Said University.
- 17- **Lamiaa Menshawy:** “Handoff Management in Mobile WiMAX Networks” awarded March 2018, Port Said University.
- 18- **Samar Hamdy:** “User Authentication in Cloud Computing” awarded December 2018, Port Said University.
- 19- **Nesma Ashry:** “Resources Allocation Strategies in Cloud Computing” awarded January 2019, Port Said University.
- 20- **Walid Moussa:** “Improvement of Load Balancing in Cloud Computing” awarded April 2019, [Suez Canal University](#).
- 21- **Mohamed Abd Elgwad:** “Packet Scheduling in Long Term Evolution Networks for Machine to Machine Communication” awarded May 2019, Port Said University.
- 22- **Mervat Salah:** “Scheduling Algorithms in Long Term Evolution” awarded 2020, Port Said University, Port Said University.
- 23- **Eman Ismail:** "Resources Management in Fog Computing Networks" awarded May 2021, Port Said University, Port Said University.
- 24- **Sara Abd-Elnaby:** “Diseases Diagnosis System using Machine Learning”, Port Said University.
- 25- **Magy Elbenhawy:** “Data Manipulation in The Internet of Robotic Things” , Port Said University.

## **9. Ph. D. Supervision**

- 1- **Ahmed Hosney:** "Optimized Automatic Code Generation for Geometric Algebra Based Algorithms with Ray Tracing Application," awarded May 2010, Suez Canal University.
- 2- **Heba Nashat:** "Mobility Management for Internet Protocol Networks," awarded October 2011, Port Said University.
- 3- **Rania Elkotby:** "Optimization in WiMAX Networks," awarded November 2011, Port Said University.
- 4- **Walaa Saber:** "The Accuracy of Network Coordinate Systems," awarded September 2014, Port Said University.
- 5- **Fify Farouk:** "A Performance Study of Heterogeneous Wireless Sensor Networks," awarded November 2014, Port Said University.
- 6- **Radwa Yousef:** "Internet Connectivity for Mobile Ad Hoc Networks," awarded December 2014, Port Said University.
- 7- **Hala Elhadidy:** "A New Methodology for joint Time-driven/Event-driven System Analysis with applications" awarded October 2015, Port Said University.
- 8- **Sara Abo Hashesh:** "Multihop Relay System for Long Term Evolution" awarded May 2018, Port Said University.
- 9- **Marwa Gamal:** "Load Balancing and Scheduling in Cloud Computing" awarded July 2019, [Suez Canal University](#).
- 10- **Yasmin Alkady:** "Data Security Achievement in Cloud Computing" awarded July 2020, Port Said University.
- 11- **Noha Elsayad:** "Efficient Energy Consumption and Error Reduction Systems in Internet of Things" awarded 2021, Port Said University.
- 12- **Heba Elmessawy:** "Task Offloading in Fog Computing Networks", Port Said University.
- 13- **Ahmed Elbaz:** "Medical Image Analysis based on Machine learning Approaches", Port Said University.

- 14- **Nihal Hosney:** "A Framework for Analyzing 4G/LTE-A Real Data using Machine Learning Algorithms", Port Said University.
- 15- **Walaa Hashem:** "Machine Learning Based Load Balancing in Cloud Computing", Port Said University.
- 16- **Heba Saleh:** "Intelligent Offloading Framework for Mobile Cloud Computing", Port Said University.
- 17- **Nesma Ashry:** "A Container-based service orchestration in Cloud computing", Port Said University.
- 18- **Walid Moussa:** "Improving Virtualization Orchestration in Cloud Environments using Predictive Models", Port Said University.
- 19- **Eman Ismail:** "Smart Container Orchestration in Fog Computing Networks", Port Said University.
- 20- **Ahmed Salah:** "Network Lifetime Optimization in Wireless Sensor Networks", Port Said University.

## **10. Thesis Referring**

- 1- **Heba Nashat:** "Mobility Management for Internet Protocol Networks," Ph.D., awarded October 2011, Faculty of Engineering, Port Said University.
- 2- **Rania Elkotby:** "Optimization in WiMAX Networks," Ph.D., awarded November 2011, Faculty of Engineering, Port Said University.
- 3- **Marwa Gamal:** "Routing Protocols in Wireless Mesh Networks," Master, awarded October 2012, Faculty of Engineering, Port Said University.
- 4- **Sara Abo Hashesh:** "Virtual Multiple-Input Multiple-Output Communications for Wireless Sensor networks," Master, awarded November 2012, Faculty of Engineering, Port Said University.
- 5- **Ghada Sandob:** "Opportunistic Scheduling for Mobile WiMAX Systems" Master, awarded May 2013, Faculty of Engineering, Port Said University.

- 6- **Awny Elmohandes:** “Information Security Techniques in Mobile Communication Systems,” Master, awarded September 2013, Faculty of Engineering, [Mansoura University](#).
- 7- **Mona Nashaat:** “Static Code Analysis for Enhancing Web Applications Using Program Transformation Tools,” Master, awarded November 2013, Faculty of Engineering, Port Said University.
- 8- **Yasmin Alkady:** “Security Protocols for Wireless Networks,” Master, awarded March 2014, Faculty of Engineering, Port Said University.
- 9- **Walaa Saber:** “The Accuracy of Network Coordinate Systems,” Ph.D., awarded September 2014, Faculty of Engineering, Port Said University.
- 10- **Fify Farouk:** “A Performance Study of Heterogeneous Wireless Sensor Networks,” Ph.D., awarded November 2014, Faculty of Engineering, Port Said University.
- 11- **Radwa Yousef:** “Internet Connectivity for Mobile Ad Hoc Networks,” Ph.D., awarded December 2014, Faculty of Engineering, Port Said University.
- 12- **Amera Mahmoud:** “Rate Control for Scalable Video Coding,” Master, awarded January 2015, Faculty of Engineering, Port Said University.
- 13- **Hala Elhadidy:** “A New Methodology for joint Time-driven/Event-driven System Analysis with applications,” Ph.D., awarded October 2015, Faculty of Engineering, Port Said University.
- 14- **Abd Alla Mosa:** “Robust Template Matching for Grayscale Images,” Master, awarded April 2016, Faculty of Engineering, Port Said University.
- 15- **Nihal Hosney:** “Performance Analysis of Mobility Management Schemes for Vehicular Networks,” Master, awarded January 2017, Faculty of Engineering, Port Said University.
- 16- **Alaa Tharwat:** “Meta-Heuristic Algorithms for Solving Function Optimization Problems,” Master, awarded January 2017, Faculty of Engineering, [Suez Canal University](#).

- 17- **Sheren Elbooz:** “Enhancement of Cloud Computing Security based on Automatic Blocker Protocol,” Master, awarded April 2017, Faculty of Engineering, [Menoufia University](#).
- 18- **Mohamed Emara:** “Image Compression using Advanced Optimization Algorithms,” Master, awarded September 2017, Faculty of Engineering, Port Said University.
- 19- **Sara Abd Elwahab:** “Trust-Based Security for Wireless Sensor Networks,” Master, awarded October 2017, Faculty of Computers and Informatics, [Suez Canal University](#).
- 20- **Aeasha Elkafrawy:** “A High Steganographic Capacity for Data Hiding in Images,” Master, awarded December 2017, Faculty of Engineering, Port Said University.
- 21- **Ahmed Salah:** “Routing in Cognitive Radio Networks,” Master, awarded January 2018, Faculty of Engineering, Port Said University.
- 22- **Walaa Hashem:** “Load Balancing of Virtual Machines in Cloud Computing,” Master, awarded March 2018, Faculty of Engineering, Port Said University.
- 23- **Lamiaa Menshawy:** “Handoff Management in Mobile WiMAX Networks,” Master, awarded March 2018, Faculty of Engineering, Port Said University.
- 24- **Sara Abo Hashesh:** “Multihop Relay System for Long Term Evolution,” Ph.D., awarded May 2018, Faculty of Engineering, Port Said University.
- 25- **Hadeer Hussein:** “Detection and Tracking of Moving Objects in Indoors Video Surveillance,” Master, awarded October 2018, Faculty of Engineering, [Suez Canal University](#).
- 26- **Samar Hamdy:** “User Authentication in Cloud Computing” Master, awarded December 2018, Faculty of Engineering, Port Said University.
- 27- **Nesma Ashry:** “Resources Allocation Strategies in Cloud Computing” Master, awarded January 2019, Faculty of Engineering, Port Said University.
- 28- **Heba Saleh:** “Scheduling Algorithms in Cloud Computing” Master, awarded March 2019, Faculty of Engineering, Port Said University.



- 29- **Walid Moussa:** "Improvement of Load Balancing in Cloud Computing" Master, awarded April 2019, Faculty of Engineering, [Suez Canal University](#).
- 30- **Mohamed Abd Elgwad:** "Packet Scheduling in Long Term Evolution Networks for Machine to Machine Communication" Master, awarded May 2019, Faculty of Engineering, Port Said University.
- 31- **Marwa Gamal:** "Load Balancing and Scheduling in Cloud Computing" Ph.D., awarded July 2019, Faculty of Engineering, [Suez Canal University](#).
- 32- **Hossam El-Deen Taha:** "Multimedia Encryption and Decryption" Ph.D., awarded January 2020, Faculty of Engineering, [Suez Canal University](#).
- 33- **Hisham Ali Sakr:** "Development of Accessing Multimedia Services over Wireless Technologies" Ph.D., awarded January 2020, Faculty of Engineering, [Mansoura University](#).
- 34- **Kareem Areed:** "An Adaptive Model for Analyzing Big Data from Wireless Sensor Network" Master, awarded April 2020, Faculty of Engineering, [Mansoura University](#).
- 35- **Osama Refaat:** "Scheduling Techniques for Performance Optimization of Long Term Evolution Mobile Systems" Ph.D., awarded June 2020, Faculty of Engineering, Port Said University.
- 36- **Hossam Eldin Agamy:** "Automatic Control of Air Quality for Closed Spaces Onboard Ships" Ph.D., awarded July 2020, Faculty of Engineering, Port Said University.
- 37- **Yasmin Alkady:** "Data Security Achievement in Cloud Computing" Ph.D., awarded July 2020, Faculty of Engineering, Port Said University.
- 38- **Mohamed Hedeya:** "Machine Learning Methods for Vehicle Classification" Master, awarded July 2020, Faculty of Engineering, Port Said University.
- 39- **Eman Ismail:** "Resources Management in Fog Computing Networks" Master, awarded October 2020, Faculty of Engineering, Port Said University.



- 40- **Amira Abd Elreheem:** "Symbolic Representation and Analysis of Parameter Varying Control Systems" Ph.D., awarded November 2020, Faculty of Engineering, Port Said University.
- 41- **Asmaa Mohamed Khaled:** "Meta-Heuristic Algorithms for Internet of Things Applications" Ph.D., awarded February 2021, Faculty of Engineering, Port Said University.
- 42- **Magy Aly Elbenhawy:** "An Improved Database Structure Based on Multi-tenancy and Cloud Computing" Master, awarded February 2021, Faculty of Engineering, Port Said University.
- 43- **Shaimaa Elsabbahi:** "MRI Brain Tumor Segmentation using Deep Learning" Master, awarded February 2021, Faculty of Engineering, [Mansoura University](#).
- 44- **Hossam El-Sherif:** "Fuzzy Analytic Hierarchy Process for Engineering Department Selection" Master, awarded May 2021, Faculty of Engineering, [Ain Shams University](#).
- 45- **Hend Samir Elmansy:** "Maximum Power Point Tracking for Photovoltaic Cells under Partial Shading Conditions using Bio-inspired Techniques" Master, awarded June 2021, Faculty of Engineering, [Mansoura University](#).
- 46- **Aya Ahmed Salama:** "Classification of Cosmic Galaxy Images Based on Machine Learning Techniques" Master, awarded June 2021, Faculty of Engineering, [Mansoura University](#).
- 47- **Said Helmy Ibrahim:** "Development of Robust Cryptosystem for Radar Data" Ph.D., awarded June 2021, Faculty of Engineering, [Mansoura University](#).
- 48- **Ghada Sandoub:** "Low Light Images Enhancement Based on Retinex Model" Ph.D., awarded August 2021, Faculty of Engineering, Port Said University.
- 49- **Noha Elsayad:** "Efficient Energy Consumption and Error Reduction Systems in Internet of Things" Ph.D., awarded October 2021, Faculty of Engineering, Port Said University.

- 50- **Ahmed Elgretly**: “Enhanced Techniques to Design High Performance Time-Based Analog-to-Digital Converter Circuits” Ph.D., awarded October 2021, Faculty of Engineering, Port Said University.
- 51- **Ahmed Arafa**: “Mining Genomic Data to Support Medical Diagnosis,” Ph.D., awarded September 2022, Faculty of Engineering, [Menoufia University](#).
- 21- **Nihal Hosney**: "A Framework for Analyzing 4G/LTE-A Real Data using Machine Learning Algorithms", Ph.D., awarded July 2024, Faculty of Engineering, Port Said University.
- 22- **Walaa Hashem**: "Machine Learning Based Load Balancing in Cloud Computing", Ph.D., awarded August 2024, Faculty of Engineering, Port Said University.

## **11. List of Publications**

### **• Book Chapters:**

- [1] Yasmin Alkady, **Rawya Rizk**, “Location Privacy- Preserving of Vehicular Ad-Hoc Network in Smart Cities.” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 532–543, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [2] Walid Moussa, Mona Nashaat, Walaa Saber, and **Rawya Rizk**, “Comprehensive Study on Machine Learning-based Container Scheduling in Cloud.” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 581–592, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.

- [3] Abeer Hassan, Radwa Attia, and **Rawya Rizk**, “Internet of Vehicles and Intelligent Routing: A Survey-Based Study,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 517–531, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [4] Heba Raouf, Rania Abdallah, Heba Y. M. Soliman, **Rawya Rizk**, “Mobility-Aware Task Offloading Enhancement in Fog Computing Networks,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp. 569–580, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [5] Heba Saleh, Walaa Saber, and **Rawya Rizk**, “Mobile Computation Offloading in Mobile Edge Computing based on Artificial Intelligence Approach: A Review and Future Directions,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 517–531, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [6] Walaa Hashem, Radwa Attia, Heba Nashaat, and **Rawya Rizk**, “Advanced Deep Reinforcement Learning Protocol to Improve Task Offloading for Edge and Cloud Computing,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 615–628, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.

- [7] R. F. Abdel-Kader, N. E. El-Sayad, and **R. Y. Rizk**, Efficient Noise Reduction System in Industrial IoT Data Streams,” *Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2021. AISI 2021. Lecture Notes on Data Engineering and Communications Technologies*, vol. 100, pp. 219–232, 2022, Springer, Cham. [https://doi.org/10.1007/978-3-030-89701-7\\_20](https://doi.org/10.1007/978-3-030-89701-7_20).
- [8] Nihal H. Mohammed, Heba Nashaat, Salah M. Abdel-Mageid, and **Rawia Y. Rizk**, A Machine Learning-based Framework for Efficient LTE Downlink Throughput. Artificial Intelligence for a Better, Smarter and Connected World: towards a Sustainable Future, *Studies in Computational Intelligence Series*, vol. 912, pp. 193-218, Springer, Cham, September 2020. [https://doi.org/10.1007/978-3-030-51920-9\\_10](https://doi.org/10.1007/978-3-030-51920-9_10)
- [9] Marwa Gamal, **Rawya Rizk**, Hani Mahdi, and Basem Elhady, Bio-Inspired based Task Scheduling in Cloud Computing. In *Machine Learning Paradigms: Theory and Applications*, *Studies in Computational Intelligence Series*, Springer, Vol. 801, pp. 289-308, 2019. [DOI: 10.1007/978-3-030-02357-7\\_14](https://doi.org/10.1007/978-3-030-02357-7_14)
- [10] **Rawya Yehia Rizk**. Quality of Services in Wireless Sensor Networks. In *Wireless Sensor Networks: From Theory to Applications*, Ibrahiem M.M.El Emary and S. Ramakrishnan (Ed.), CRC Press, Taylor & Francis Group, USA, August 2013.  
<http://www.crcpress.com/product/isbn/9781466518100>
- [11] **Rawya Yehia Rizk**. Cooperative Systems in Wireless Sensor Networks. In *Wireless Sensor Networks: From Theory to Applications*, Ibrahiem M.M.El Emary and S. Ramakrishnan (Ed.), CRC Press, Taylor & Francis Group, USA, August 2013.  
<http://www.crcpress.com/product/isbn/9781466518100>

- **Journals:**

- [1] Y. Alkady, **R. Rizk**, D. m. Alsekait, A. S. Alluhaidan and D. S. AbdElMinaam, "SINS\_AR: An Efficient Smart Indoor Navigation System Based on Augmented Reality," *IEEE Access*, 2024. doi: 10.1109/ACCESS.2024.3439357.
- [2] Ahmed Fathy Abouzeid, Hadeer Eleraky, Ahmed Kalas, **Rawya Rizk**, Mohamed Mohamed Elsakka, and Ahmed Refaat, “Experimental validation of a low-cost

- maximum power point tracking technique based on artificial neural network for photovoltaic systems,” *Scientific Reports*, Vol. 14, no. 18280, 2024. <https://doi.org/10.1038/s41598-024-67306-0>
- [3] Heba Nashaat, Nihal H. Mohammed, Salah M. Abdel-Mageid, and **Rawya Y. Rizk**, “Machine Learning-based Cellular Traffic Prediction Using Data Reduction Techniques,” *IEEE Access*, 2024.
- [4] Heba Nashaat, Walaa Hashem, **Rawya Rizk**, and Radwa Attia, "DRL-Based Distributed Task Offloading Framework in Edge-Cloud Environment," *IEEE Access*, 2024.
- [5] AbdElhameed Ibrahim, El-sayed M El-Kenawy, Marwa M. Eid, AbdElaziz A. AbdElhamid, M. El-Said, Amal H. Alharbi, Doaa Sami Khafaga, Wael A. Awad, **Rawya Y. Rizk**, Nadjem Bailek, and Mohammed A. Saeed “A Recommendation System for Electric Vehicles Users Based on Restricted Boltzmann Machine and WaterWheel Plant Algorithms,” *IEEE Access*, 2023.
- [6] Sara M. M. Abohashish, **Rawya Y. Rizk**, and E. I. Elsedimy, “Trajectory optimization for UAV-assisted relay over 5G networks based on reinforcement learning framework,” *EURASIP Journal on Wireless Communications and Networking*, vol. 55, 2023. <https://doi.org/10.1186/s13638-023-02268-x>
- [7] Radwa Attia, Abeer Hasaan, and **Rawya Rizk**, “Advanced Greedy Hybrid Bio-Inspired Routing Protocol to Improve IoV,” *IEEE Access*, vol. 9, pp. 131260-131272, September 2021. <https://doi.org/10.1109/ACCESS.2021.3114646>
- [8] Fifi Farouk, Yasmin Alkady, and **Rawya Rizk**, "Privacy preserving location based services query scheme based on fully homomorphic encryption," *Journal of Theoretical and Applied Information Technology*, vol. 99, no. 16, pp. 4098- 4121, August 2021.
- [9] Rabab Farouk Abdel-Kader, Noha Emad El-Sayad, and **Rawya Yehia Rizk**, “Efficient energy and completion time for dependent task computation offloading algorithm in industry 4.0,” *PLoS ONE*, vol. 16, no. 6, e0252756, June 2021. <https://doi.org/10.1371/journal.pone.0252756>
- [10] Walaa Saber, Walid Moussa, Atef M. Ghuniem, **Rawya Y. Rizk**, "Hybrid load balance based on genetic algorithm in cloud environment," *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 11, no. 3, December 2020, DOI: <http://doi.org/10.11591/ijece.v11i3.pp%25p>.

- [11] Heba Nashaat, Eman Ahmed, and **Rawya Rizk** "IoT application placement algorithm based on multi-dimensional QoE prioritization model in fog computing environment," *IEEE Access*, vol. 8, pp. 111253-111264, June 2020. <https://doi.org/10.1109/ACCESS.2020.3003249>
- [12] Fifi Farouk, Yasmin Alkady, and **Rawya Rizk**, "Efficient privacy-preserving scheme for location based services in VANET system," *IEEE Access*, vol. 8, no. 1, pp. 60101-60116, December 2020. <https://doi.org/10.1109/ACCESS.2020.2982636>
- [13] Rabab F. Abdel-Kader, Samar El-sherif, and **Rawya Y. Rizk**, "Two-stage cryptography scheme for secure distributed data storage in cloud computing" *International Journal of Electrical and Computer Engineering (IJECE)*, vol. 10, no. 3, pp. 3295-3306, June 2020. <http://doi.org/10.11591/ijece.v10i3.pp3295-3306>
- [14] Sara M. M. Abo Hashish, **Rawya Y. Rizk**, and Fayez W. Zaki, "Towards energy efficient relay deployment in multi-user LTE-A networks," *IET Communications*, vol. 13, no. 17, pp. 2688 – 2696, 2019, [DOI: 10.1049/iet-com.2018.5034](https://doi.org/10.1049/iet-com.2018.5034)
- [15] Sara M. M. Abo Hashish, **Rawya Y. Rizk**, and Fayez W. Zaki, "Energy efficiency optimization for relay deployment in multi-user LTE-advanced networks," *Wireless Personal Communications, Springer*, vol. 108, no. 1, pp. 297-323, 2019. [DOI: 10.1007/s11277-019-06404-z](https://doi.org/10.1007/s11277-019-06404-z)
- [16] Marwa Gamal, **Rawya Rizk**, Hani Mahdi, and Basem E. Elnaghi, "Osmotic bio-inspired load balancing algorithm in cloud computing," *IEEE Access*, vol. 7, no. 1, pp. 42735-42744, 2019. <https://doi.org/10.1109/ACCESS.2019.2907615>
- [17] Heba Nashaat, Nesma Ashry, and **Rawya Rizk**, "Smart elastic scheduling algorithm for virtual machine migration in cloud computing," *Journal of Supercomputing, Springer*, vol. 75, no. 7, pp. 3842-3865, 2019. [DOI: 10.1007/s11227-019-02748-2](https://doi.org/10.1007/s11227-019-02748-2)
- [18] Lamiaa Menshawy, Heba Nashaat, and **Rawya Rizk**, "Multi-objective handoff scheme for macro/ femto WiMAX networks," *Journal of Circuits, Systems, and Computers, World Scientific*, vol. 28, no. 1, pp. 1 -24, 2019. [DOI: 10.1142/S0218126619500166](https://doi.org/10.1142/S0218126619500166)
- [19] Ahmed Salah, Heba Abd Elatty, and **Rawya Y. Rizk**, "Joint channel assignment and power allocation based on maximum concurrent multi-commodity flow in

- cognitive radio networks," *Wireless Communications and Mobile Computing*, John Wiley & Sons, and Hindawii, vol. 2018, Article ID 3545946, 14 pages, <https://doi.org/10.1155/2018/3545946>
- [20] **Rawya Rizk**, and Heba Nashaat, "Smart prediction for seamless mobility in F-HMIPv6 based on location based services," *China Communications*, vol. 15, no. 4, pp. 192-209, April 2018, <http://www.cic-chinacommunications.cn/EN/>
- [21] Sara M. M. Abo Hashish, **Rawya Y. Rizk**, and Fayez W. Zaki, "Joint energy and spectral efficient power allocation for Long Term Evolution-Advanced," *Computers and Electrical Engineering*, Elsevier, vol. 72, pp. 828-845, November 2018, <https://doi.org/10.1016/j.compeleceng.2017.12.047>.
- [22] Walaa Hashem, Heba Nashaat, and **Rawya Rizk**, "Honey bee based load balancing in cloud computing," *KSII Transactions on Internet and Information Systems (TIIS)*, vol. 11, no. 12, pp. 5694-5711, December 2017, [DOI: 10.3837/tiis.2017.12.001](https://doi.org/10.3837/tiis.2017.12.001).
- [23] **Rawya Rizk**, Fifi Farouk, and Fayez W. Zaki, "Towards energy efficiency and stability in heterogeneous wireless sensor networks," *Wireless Personal Communications*, Springer, vol. 96, no. 3, pp. 4347-4365, October 2017, [DOI: 10.1007/s11277-017-4390-1](https://doi.org/10.1007/s11277-017-4390-1).
- [24] Hala Elhadidy, **Rawya Rizk**, and Hassan T. Dorrah, "Generalized data stacking programming model with applications," *Journal of Electrical Systems and information Technology*, ELSEVIER, vol.3, no. 2, pp. 230-260, September 2016, [DOI: 10.1016/j.jesit.2015.11.013](https://doi.org/10.1016/j.jesit.2015.11.013).
- [25] **Rawya Rizk**, and Yasmin Alkady "Two-phase hybrid cryptography algorithm for wireless sensor networks," *Journal of Electrical Systems and information Technology*, ELSEVIER, vol. 2, no. 3, pp. 296-313, December 2015. [DOI: 10.1016/j.jesit.2015.11.005](https://doi.org/10.1016/j.jesit.2015.11.005).
- [26] Heba Nashaat, and **Rawya Rizk**, "Handover management based on location based services in F-HMIPv6 networks," *KSII Transactions on Internet and Information Systems (TIIS)*, vol. 9, no. 12, pp. 5028-5057, December 2015, <http://dx.doi.org/10.3837/tiis.2015.12.016>.
- [27] Abdullah M. Moussa, M. I. Habib, and **Rawya Y. Rizk**, "FRoTeMa: fast and robust template matching" *International Journal of Advanced Computer Science*



- and Applications (IJACSA)*, vol. 6, no. 10, pp. 195-200, October 2015, [DOI: 10.14569/IJACSA.2015.061028](https://doi.org/10.14569/IJACSA.2015.061028).
- [28] Radwa Attia, **Rawya Rizk**, and Hesham Arafat Ali, "Efficient internet access framework for mobile Ad Hoc networks," *Wireless Personal Communications, Springer*, vol. 84, no. 3, pp. 1689-1722, October 2015, [DOI: 10.1007/s11277-015-2600-2](https://doi.org/10.1007/s11277-015-2600-2).
- [29] Radwa Attia, **Rawya Rizk**, and Hesham Arafat Ali, "Internet connectivity for mobile Ad Hoc network: A survey based study," *Wireless Networks, Springer*, vol. 21, no. 7, pp. 2369-2394, October 2015, [DOI: 10.1007/s11276-015-0922-3](https://doi.org/10.1007/s11276-015-0922-3).
- [30] **Rawya Rizk**, Sara M. Magdy, and Fayez W. Zaki, "Energy efficiency of virtual multi-input, multi-output based on sensor selection in wireless sensor networks," *Wireless Communications and Mobile Computing, John Wiley & Sons*, vol. 15, no. 1, pp. 1-15, January 2015, [DOI: 10.1002/wcm.2310](https://doi.org/10.1002/wcm.2310).
- [31] Fifi Farouk, **Rawya Rizk**, and Fayez W. Zaki, "Multi-level stable and energy efficient clustering protocol in heterogeneous wireless sensor network," *IET Wireless Sensor Systems*, vol. 4, no. 4, pp. 159-169, December 2014, [DOI: 10.1049/iet-wss.2014.0051](https://doi.org/10.1049/iet-wss.2014.0051).
- [32] Hala Elhadidy, **Rawya Rizk**, and Hassan Dorrah, "Routing in wireless sensor networks based on generalized data stack programming model," *International Journal of Advanced Computer Science and Applications (IJACSA)*, vol. 5, no. 11, November 2014, [DOI : 10.14569/IJACSA.2014.051113](https://doi.org/10.14569/IJACSA.2014.051113).
- [33] **Rawya Rizk**, Walaa Saber, and Hany Harb, "Conditional clustered matrix factorization based network coordinate system," *Journal of Network and Computer Applications, ELSEVIER*, vol. 45, pp. 191-202, October 2014, [DOI: 10.1016/j.jnca.2014.07.027](https://doi.org/10.1016/j.jnca.2014.07.027).
- [34] Rashid M. Awadi, **Rawya Y. Rizk**, Mohamed I. Habib, and Amira A. Elsonbaty, "An efficient cluster head selection scheme for dynamic sleep time in wireless sensor network," *International journal of Electronics and Communication Engineering & Technology (IJECEET)*, vol. 4, issue 6, pp. 1-13, November-December, 2013.  
<http://www.iaeme.com/Journalcureentissue.asp>
- [35] **Rawya Rizk**, Marwa Gamal, and Mahmoud Marie, "Selective opportunistic routing based on QoS in wireless mesh network," *International Journal of Trust*



- Management in Computing and Communications, Inderscience Publishers*, vol. 1, nos. 3/4, pp. 212-229, 2013, [DOI: 10.1504/IJTMCC.2013.056425](https://doi.org/10.1504/IJTMCC.2013.056425).
- [36] **Rawya Rizk**, Hala Elhadidy, and Hamed Nassar, "Optimized mobile radio aware routing algorithm for wireless sensor networks," *IET Wireless Sensor Systems*, vol. 1, no. 4, pp. 206-217, December 2011, [DOI: 10.1049/iet-wss.2011.0047](https://doi.org/10.1049/iet-wss.2011.0047).
- [37] Heba Nashaat, **Rawya Rizk**, and Hani Mahdi, "A robust analytical model of mobile IP handoff with multiple traffic profiles," *International Journal of Wireless Information Networks, Springer*, vol. 18, no. 4, pp. 210-223, 2011, [DOI 10.1007/s10776-011-0152-2](https://doi.org/10.1007/s10776-011-0152-2).
- [38] **Rawya Rizk**, Alyaa Elmaghraby, and Mahmoud Mariee, "QoS protection optimization for MPLS," *International Journal of Communication Networks and Distributed Systems (IJCNDs), Inderscience Publishers*, vol. 6, no. 4, pp. 420-437, 2011 .
- [39] Radwa Attia, **Rawya Rizk**, and Mahmoud Mariee, "An ant inspired QoS routing algorithm for MANETs," *The International Journal of Ad Hoc & Sensor Wireless Networks, Old City Publishing*, vol. 10, no. 2-3, pp. 111-134, 2010.
- [40] **Rawya Rizk**, "Uplink downlink limited round robin scheduling algorithms," *The International Arab Journal of Information Technology (IAJIT)*, vol. 7, no. 2, pp. 256-263, 2010.
- [41] Randa Atta, **Rawya Rizk**, and Mohammad Ghanbari, "Motion-compensated DCT temporal filters for efficient spatio-temporal scalable video coding," *Signal Processing: Image Communication, ELSEVIER*, vol. 24, Issue 9, pp. 702-717, October 2009.
- [42] **Rawya Rizk**, Randa Atta, and Mohammad Ghanbari, "A cost optimization policy for handoff rerouting," *Int. Journal of Mobile Communications, Inderscience*, vol. 7, no. 6, pp. 715-730, 2009.
- [43] Amira Elsonbaty, **Rawya Rizk**, Mohamed Elksas, and Mofreh Salem, "A cooperative multi-robot control using Ad hoc wireless network," *World Academy of Science, Engineering and Technology (WASET)*, issue 29, pp.997-1004, June 2009.  
<http://www.waset.org/journals/waset/v54/v54-170.pdf>

- [44] **Rawya Rizk**, Rehab Abdel-Kader, and Rabab Ramadan, "Adaptive early packet discarding policy based on two traffic classes," *International Journal of Electrical, Computer, and System Engineering*, WASET, vol. 2, no. 1, pp.250-257, 2008.  
<http://www.akademik.unsri.ac.id/download/journal/files/waset/v2-4-35-10.pdf>
- [45] Rehab Abdel-Kader, Rabab Ramadan, and **Rawya Rizk**, "Rotation invariant face recognition based on hybrid LPT/DCT features," *International Journal of Intelligent Systems and Technologies*, WASET, vol. 3, no. 7, pp. 488-493, 2008.  
<http://www.waset.org/journals/ijece/v3/v3-7-70.pdf>
- [46] A. Ibrahim, **R. Y. Rizk**, and G. A. Mahmoud, "A priority gated round robin polling scheme for Bluetooth piconets," *The International Arab Journal of Information Technology (IAJIT)*, vol. 5, no. 2, pp. 178-134, April 2008.
- [47] W. E. Saber, **R. Y. Rizk**, and A. Sallam, "Prioritized on-demand packet discard scheme for TCP over ATM," *Port Said Engineering Research Journal (PSERJ), Faculty of Engineering, Suez Canal University*, vol. 11, no. 2, pp. 1-10, September 2007.
- [48] H. N. El-moafy, **R. Y. Rizk**, M. M. El-Dakiky, and M. I. Marie, "Impact of handoff enhancement in mobile IP-based networks," *Egyptian Informatics Journal, Faculty of Computers and Information, Cairo University*, vol. 7, no. 1, pp.1-16, June 2006.
- [49] **R. Y. Rizk**, M. Hamed, "Throughput performance in networks with voice/data integration," *Gaphra Science and Engineering Journal*, Hoon Institute, 2006.
- [50] H. N. El-moafy, **R. Y. Rizk**, M. M. El-Dakiky, and M. I. Marie, "Performance analysis of optimizing smooth handoffs in mobile IP," *Scientific Bulletin, Faculty of Engineering, Ain Shams University*, vol.40, no. 4, pp. 553-568, December 2005.
- [51] **R. Y. Rizk**, "Multi-agent traffic and congestion control for ATM networks," *Al-Azhar University Engineering Journal (AUEJ), Faculty of Engineering, Al-Azhar University*, vol. 7, no. 1, pp. 101-110, January 2004.
- [52] **R. Y. Rizk**, "Multi-time-scale, multi-service-class fuzzy control design for ATM networks," *Mansoura Engineering Journal (MEJ), Faculty of Engineering, Mansoura University*, vol. 28, no. 2, pp. E.8-E.20, June 2003.
- [53] H. M. K. Mahdi, Y. H. Dakroury, M. M. El-Dakiky, and **R. Y. Rizk**, " A neuro-fuzzy controller for buffer management in ATM networks," *Scientific Bulletin*,

*Faculty of Engineering, Ain Shams University*, vol. 36, no. 1, pp. 275-295, March 2001.

• **Conferences:**

- [1] Nesma Ashry, Radwa Attia, Heba Nashaat, and **Rawya Rizk**, “CO2 Emission Mitigation in Container-Based Cloud Computing by the Power of Resource Management,” *The 9th International Conference on Advanced Intelligent Systems and Informatics, AISI2023*, Egypt, September 2023.
- [2] Magy ElBanhawy, Asmaa Mohamed, Walaa Saber and **Rawya Yehia Rizk**, “The Internet of Robotic Things: A review of concept, challenges and applications,” *The 9th International Conference on Advanced Intelligent Systems and Informatics, AISI2023*, Egypt, September 2023.
- [3] Heba Nashaat, Mohamed Abd Elgwad, **Rawya Rizk**, and Aboul Ella Hassanien, “A Multi-Service Adaptive LTE Uplink Scheduler based on Reservation for Machine -to- Machine Communication,” *The 9th International Conference on Advanced Intelligent Systems and Informatics, AISI2023*, Egypt, September 2023.
- [4] Eman Ahmed, Heba Nashaat, and **Rawya Rizk**, “Machine Learning for Fog Computing: Perceiving QoE for IoT Applications,” *The 9th International Conference on Advanced Intelligent Systems and Informatics, AISI2023*, Egypt, September 2023.
- [5] Amr Mansi, Heba Abdallah, Fand LiFeng, Chuan-Jie Fang, Xin-Yu Zhang, Yasser Elenawy, Amira Reda, Monzer Ashraf, **Rawya Rizk**, Mohamed Bassyouni, “Recycling Reverse Osmosis Membranes: Addressing the Challenges of Non-Biodegradability and Waste Generation,” *4<sup>th</sup> International Conference for Membrane Technology & Its Applications*, Egypt, August 2023.
- [6] Mohamed M. Elsakka, Mohamed Bassyouni, **Rawya Y. Rizk**, and Ayman M. I. Mohamed, “Sustainability Research at Port Said University towards the Achievement of the Sustainable Development Goals,” *1<sup>st</sup> International Conf. on Engineering Solutions towards Sustainable Developments*, Egypt, May 2023.
- [7] Hussien M. Hassan, Mohamed M. Elsakka, Ahmed Refaat, Ahmed E. Amer, and **Rawya Y. Rizk**, “Optimal Design of Container Ships Geometry Based on Artificial Intelligence Techniques to Reduce Greenhouse Gases Emissions,” *1<sup>st</sup>*

*International Conf. on Engineering Solutions towards Sustainable Developments*, Egypt, May 2023.

- [8] Yasmin Alkady, **Rawya Rizk**, “Location Privacy- Preserving of Vehicular Ad-Hoc Network in Smart Cities.” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 532–543, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [9] Walid Moussa, Mona Nashaat, Walaa Saber, and **Rawya Rizk**, “Comprehensive Study on Machine Learning-based Container Scheduling in Cloud.” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 581–592, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [10] Abeer Hassan, Radwa Attia, and **Rawya Rizk**, “Internet of Vehicles and Intelligent Routing: A Survey-Based Study,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 517–531, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [11] Heba Raouf, Rania Abdallah, Heba Y. M. Soliman, **Rawya Rizk**, “Mobility-Aware Task Offloading Enhancement in Fog Computing Networks,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp. 569–580, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [12] Heba Saleh, Walaa Saber, and **Rawya Rizk**, “Mobile Computation Offloading in Mobile Edge Computing based on Artificial Intelligence Approach: A Review and Future Directions,” In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 517–531, May 2022.

- Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [13] Walaa Hashem, Radwa Attia, Heba Nashaat, and **Rawya Rizk**, "Advanced Deep Reinforcement Learning Protocol to Improve Task Offloading for Edge and Cloud Computing," In: *Hassanien, A.E., Rizk, R.Y., Snášel, V., Abdel-Kader, R.F. (eds) The 8th International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2022)*, Egypt, pp 615–628, May 2022. Lecture Notes on Data Engineering and Communications Technologies (LNDECT), vol 113. Springer, Cham.
- [14] Rabab Farouk Abdel-Kader, Noha Emad El-Sayad, and **Rawya Yehia Rizk**, "Efficient Noise Reduction System in Industrial IoT Data Streams," *International Conference on Advanced Intelligent Systems and Informatics (AISI)*, Cairo, Egypt, December 2021.
- [15] Ahmed El-Baz, Walaa Saber, and **Rawya Y. Rizk**, "LWCOV: LightWeight deep convolutional neural network for COVID-19 detection," in Proc. of 7<sup>th</sup> International Conference on Advanced Machine Learning and Technologies and Applications (AMLTA2021), Cairo, Egypt, March 2021.
- [16] Nihal H. Mohammed, Heba Nashaat, Salah M. Abdel-Mageid and **Rawya Y. Rizk**, "A framework for analyzing 4G/LTE-A real data using machine learning algorithms," in Proc. of *the international conference on Advanced Intelligent Systems and Informatics (AISII2020)*, Cairo, Egypt, October 2020. *Advances in Intelligent Systems and Computing*, vol. 1261, Springer, Cham. [https://doi.org/10.1007/978-3-030-58669-0\\_73](https://doi.org/10.1007/978-3-030-58669-0_73).
- [17] Nesma Ashry, Heba Nashaat, and **Rawya Rizk**, "AMS: Adaptive migration scheme in cloud computing," in Proc. of *the International Conference on Advanced Intelligent Systems and Informatics 2018, Advances in Intelligent Systems and Computing*, Springer, vol. 845, pp. 357-369, Cairo, Egypt, September 2018.  
<https://link.springer.com/book/10.1007/978-3-319-99010-1>
- [18] Yasmin Alkady, Fifi Farouk, and **Rawya Rizk**, "Fully homomorphic encryption with AES in cloud computing security," in Proc. of *the International Conference on Advanced Intelligent Systems and Informatics 2018, Advances in Intelligent*

*Systems and Computing*, Springer, vol. 845, pp. 370-382, Cairo, Egypt, September 2018.

<https://link.springer.com/book/10.1007/978-3-319-99010-1>

- [19] Samar H. El-sherif, Rabab F. Abdel-kader, and **Rawya Y. Rizk** " Two-factor authentication scheme using one time password in cloud computing," in Proc. of *the International Conference on Advanced Intelligent Systems and Informatics 2018, Advances in Intelligent Systems and Computing*, Springer, vol. 845, pp. 425-434, Cairo, Egypt, September 2018.

<https://link.springer.com/book/10.1007/978-3-319-99010-1>

- [20] Walaa E. Saber, and **Rawya Y. Rizk**, Walid M. Moussa, and Atef M. Ghonem, "LBSR: Load balance over slow resources," in Proc. of *International Conference on Computer Applications & Technology (ICCAT)*, Cairo, Egypt, January 28-29, 2017. Also published in Proc. of *1<sup>st</sup> International Conference on Computer Applications & Information Security (ICCAIS)*, Riyadh, Saudi Arabia, April 4-6, 2018. DOI: [10.1109/CAIS.2018.8442041](https://doi.org/10.1109/CAIS.2018.8442041)

- [21] Lamiaa Menshawy, Heba Nashaat, and **Rawya Rizk**, "SLUM: Smart location update mechanism for random mobility model," in Proc. of *13<sup>th</sup> International Computer Engineering Conference (ICENCO)*, Cairo, Egypt, pp. 357-369, December 2017.

- [22] Marwa Gamal, **Rawya Rizk**, Hani Mahdi, and Basem Elhady, "Bio-inspired load balancing algorithm in cloud computing," in Proc. of *The International conference on Advanced Intelligent Systems and Informatics (AISI)*, Cairo, Egypt, Chapter 54, pp. 579-589, September 2017, DOI: [10.1007/978-3-319-64861-3\\_54](https://doi.org/10.1007/978-3-319-64861-3_54)

- [23] Sara M. Magdy, **Rawya Y. Rizk**, and Fayez W. Zaki, "Optimal multi-relay placement for LTE-A," in Proc. of *11<sup>th</sup> International Computer Engineering Conference (ICENCO)*, Cairo, Egypt, pp. 195-200, December 29-30, 2015, DOI: [10.1109/ICENCO.2015.7416347](https://doi.org/10.1109/ICENCO.2015.7416347).

- [24] Ahmed Salah, Heba Abd El-Atty, and **Rawya Y. Rizk**, " Cross-layer routing optimization for centralized multi-hop cognitive radio networks," in Proc. of *11<sup>th</sup> International Computer Engineering Conference (ICENCO)*, Cairo, Egypt, pp. 25-31, December 29-30, 2015, DOI: [10.1109/ICENCO.2015.7416321](https://doi.org/10.1109/ICENCO.2015.7416321).

- [25] Ehab Karim, Heba Nashaat, and **Rawya Y. Rizk**, "QoS management in WiMAX femtocells," in Proc. of *11<sup>th</sup> International Computer Engineering Conference*



- (*ICENCO*), Cairo, Egypt, pp. 201-206, December 29-30, 2015, DOI: [10.1109/ICENCO.2015.7416348](https://doi.org/10.1109/ICENCO.2015.7416348).
- [26] Walaa Saber, **Rawya Rizk**, and Hany Harb, "Improving prediction accuracy of matrix factorization based network coordinate systems," in Proc. of *9<sup>th</sup> International Computer Engineering Conference (ICENCO)*, pp. 116-121, Cairo, Egypt, December 29-30, 2013.
- [27] Yasmin Alkady, M. I. Habib, and **Rawya Rizk**, "A new security protocol using hybrid cryptography algorithms," in Proc. of *9<sup>th</sup> International Computer Engineering Conference (ICENCO)*, pp. 109-115, Cairo, Egypt, December 29-30, 2013.
- [28] Hala Elhadidy, **Rawya Rizk**, and Hassan T. Dorrah, "A new generalized data stacking programming (GDSP) model," in Proc. of *9<sup>th</sup> International Computer Engineering Conference (ICENCO)*, pp. 78-84, Cairo, Egypt, December 29-30, 2013.
- [29] Fifi Ahmed, **Rawya Rizk**, and Fayez W. Zaki, "Stable and energy-efficient clustering protocol for heterogeneous wireless sensor networks," in Proc. of *Sixth International Conference on Intelligent Computing and Information Systems (ICICIS)*, pp. 71-76, Cairo, Egypt, December 14-16, 2013.
- [30] Sara M. Magdy, **Rawya Rizk**, and Fayez W. Zaki, "Sensor selection based technique for cooperative MIMO in WSNs," in Proc. of *The World Congress on Computer Science and Information Technology (WCSIT'12)*, INFOMESR, Cairo, Egypt, December 23-27, 2012.
- [31] Ghada Sandoub, **Rawya Rizk**, and Fayez W. Zaki, "The opportunistic scheduling for mobile WiMAX systems," in Proc. of *The World Congress on Computer Science and Information Technology (WCSIT'12)*, INFOMESR, Cairo, Egypt, December 23-27, 2012.
- [32] **Rawya Rizk** "Adaptive QoS routing for MPLS networks," in Proc. of *Global Congress on Science and Engineering (GCSE)*, UAE, December 2011.
- [33] Heba Nashaat, **Rawya Rizk**, and Hani Mahdi, "Performance analysis of streamed Video over mobile IP based networks," in Proc. of *9th IEEE/ACS International Conference on Computer Systems and Applications (AICCSA)*, pp. 225-232, Sharm El-Sheikh, Egypt, December 2011, DOI: 10.1109/AICCSA.2011.6126620.

- [34] Rania Elkotby, **Rawya Rizk**, and Mahmoud Marie, "Adaptive scanning and handover triggering for mobile WiMAX," in Proc. of *13th IEEE Joint International Computer Science and Information Technology Conference (JICSIT 2011)*, vol. 2, pp. 6-11, China, August 2011.
- [35] Ahmed Salama, Randa Atta, **Rawya Rizk**, and Fayez Wanes, "A robust digital image watermarking technique based on wavelet transform," in Proc. of *IEEE International Conference on System Engineering and Technology (ICSET)*, pp. 100-105, Malaysia, June 2011.
- [36] Heba Nashaat, **Rawya Rizk**, and Hani Mahdi, "An analytical framework of fast handover for hierarchical MIPv6," in Proc. of *The World Congress on Computer Science and Information Technology (WCSIT'11)*, *INFOMESR*, vol. 1, no. 2, pp. 38-44, Cairo, Egypt, January 24-27, 2011.  
<http://www.infomesr.org/attachments/7-074.pdf>
- [37] Hala Elhadidy, **Rawya Rizk**, and Hamed Nassar, "Non-linear optimization of mobile radio aware routing algorithm in wireless sensor networks," in Proc. of *The World Congress on Computer Science and Information Technology (WCSIT'11)*, *INFOMESR*, vol. 1, no. 1, pp. 23-28, Cairo, Egypt, January 24-27, 2011.  
<http://www.infomesr.org/attachments/4-075.pdf>
- [38] **Rawya Rizk**, "Efficient traffic sensitive routing for MPLS networks," in Proc. of *IEEE International Conference on Intelligent Network and Computing (ICINC 2010)*, vol. 2, pp. 316-323, Malaysia, November 2010.
- [39] **Rawya Rizk**, Alyaa Elmaghraby, and Mahmoud Mariee, "Protection optimization for MPLS networks," in Proc. of *IEEE International Conference on Computer and Network Technology (ICCNT 2010)*, Thailand, pp. 175-180, April 2010.
- [40] Ahmad Eid, Abd El Hay Sallam, Mohammed Farghly, and **Rawya Rizk**, "Gmac: a novel code generator for geometric modeling based on geometric algebra," in Proc. of *19<sup>th</sup> International Conference on Computer Theory and Applications (ICCTA'09)*, Egypt, 2009.
- [41] Rehab Abdel-Kader, Rabab Ramadan, and **Rawya Rizk**, "A hybrid rotation-invariant face recognition system using log-polar transform," in Proc. of *IEEE International Symposium on Signal Processing and IT (ISSPIT'09)*, UAE, December 2009.



- [42] Randa Atta, **Rawya Rizk**, and Mohammad Ghanbari, "Spatio-temporal scalability based on motion-compensated DCT temporal filters," in Proc. of *IEEE International Conference on Image Processing (ICIP'09)*, Cairo, Egypt, November 2009.
- [43] Radwa Attia, **Rawya Rizk**, and Mahmoud Mariee, "A hybrid multi-path ant QoS routing algorithm for MANETs," in Proc. of *IEEE/IFIP International Conference on Wireless and Optimal Communications Networks(WOCN'09)*, Cairo, Egypt, April 28-30, 2009.
- [44] **Rawya Rizk**, Randa Atta, and Mohammad Ghanbari, "A two-phase handoff policy for mobility management in wireless ATM," in Proc. of *IEEE/IFIP International Conference on Wireless and Optimal Communications Networks (WOCN'09)*, Cairo, Egypt, April 28-30, 2009.
- [45] **Rawya Rizk**, "Performance enhancement of piconet scheduling schemes under asymmetric traffic," in Proc. of *International Computer Engineering Conference (ICENCO'08)*, Cairo University, Egypt, December 2008.
- [46] F. F. Ahmed, **R. Y. Rizk**, and F. W. Zaki, "Path optimization algorithm for two-phase inter-switch handoff in wireless ATM," in Proc. of *IEEE International Conference on Computer Engineering and Systems (ICCES'07)*, Egypt, pp. 172-178, November 2007.
- [47] **R. Y. Rizk**, "Priority queuing model for handoff enhancement in mobile IP," in *Proc. International Computer Engineering Conference (ICENCO'06)*, pp. NW 110- NW 117, Egypt, December 2006.
- [48] H. M. K. Mahdi, Y. H. Dakroury, M. M. El-Dakiky, and **R. Y. Rizk**, " Fuzzy buffer management for ATM networks," in *Proc. 8<sup>th</sup> ICAIA'2000*, pp.325-336, February 2000.
- [49] H. M. K. Mahdi, Y. H. Dakroury, M. M. El-Dakiky, and **R. Y. Rizk**, "A three-service-class queuing ATM switch using analytic hierarchy process," in *Proc. 3<sup>rd</sup> ICER-99*, vol. 1, pp. 41-54, November 1999.
- [50] M. Hamed, H. El-Deeb, and **R. Y. Rizk**, "Integration of voice and data on a token ring networks," in *Proc. 4<sup>th</sup> Telecommunication & Information System*, Jordan, May 1995.

### Extracurricular Activities:

- An Active member at Rotary Club of Port Said (founded 1934) from 2021–Till Present, where the following responsibilities and achievements were done:
  - Participated in community service projects,
  - Developed leadership skills by coordinating events and managing team activities, collaborated with local organizations to address community needs,
  - Engaged in fundraising initiatives, and networked with professionals and peers to enhance community engagement and personal development.
- Head of Youth committee at Rotary Club of Port Said from 2022 – till 2024.
- Delivering a seminar at the Ministry of Planning, entitled "The Role of Digital Transformation in Achieving Sustainable Economic Empowerment of Women", March 2022, and receiving a certificate of appreciation from the Ministry.
- Delivering a seminar at Port Said University in cooperation with the National Council for Women, entitled "Women and Sustainable Development According to the National Strategy for the Empowerment of Egyptian Women 2030", March 2024.
- Delivering a seminar at the Arab Academy for Science, Technology and Maritime Transport, entitled "Top Technology Trends in 2025", November 2024, and receiving a certificate of appreciation from the Academy.