

التقرير السنوي لقسم الهندسة الكهربائية للعام الجامعي ٢٠٢٣-٢٠٢٢

نبذه مختصره عن القسم

يعد قسم الهندسة الكهربائية من أول الأقسام التي استقبلت طلاباً في كلية الهندسة بعدما بدأت الدراسة بالكلية يوم السبت الموافق ١٩٩٠/١٠/٢٧ وتنقسم شعب الدراسة في قسم الهندسة الكهربائية إلى:

١. هندسة القوى والآلات الكهربائية.
٢. هندسة الإلكترونيات والاتصالات الكهربائية.
٣. هندسة الحاسبات والنظم.

١- رؤية القسم

أن يكون قسم الهندسة الكهربائية مواكبا للتطور التكنولوجي ذو مكانة محلية وإقليمية ودولية متميزة تتسم بجودة الأداء.

٢- الرسالة

توفير تعليم عالي الجودة للطلاب يمكنهم من خدمة المجتمع بمهاراتهم وقدراتهم المهنية والتقنية والإدارية والبحثية في تخصصات القوى والآلات الكهربائية، الإلكترونيات والاتصالات الكهربائية، والحاسبات والنظم.

٣- أهداف القسم

- تجهيز خريجي القسم بما يلزمهم من زاد المعرفة الضرورية ومهارات الاتصال بحيث يمكنهم التعاون وإنجاز الأعمال كفريق واحد، كما يمكنهم التفاعل البناء مع زملائهم من المهندسين أو من التخصصات الأخرى في كافة أنحاء العالم. ومن ثم، فإن هدف القسم هو إنشاء برامج تعليمية يمكن تلخيص فلسفتها فيما يلي:
- إن الهندسة هي المهنة التي يجري فيها التطبيق الحصيل للمعرفة بالرياضيات والعلوم الطبيعية المكتسبة بالدراسة والخبرة والممارسة، وذلك بهدف تطوير طرائق للاستغلال الاقتصادي للمواد ولقوى الطبيعة فيما ينفع الناس. ولذلك يتم تزويد الطلاب بمجموعة عريضة من المبادئ الهندسية والعلمية.
 - تمثل الهندسة ذلك العلم المعني بوضع المعرفة العلمية في إطار الاستخدام العملي. يتم تزويد الطلاب بخلفية قوية في أساسيات هندسة القوى الكهربائية، أو هندسة الإلكترونيات والاتصالات الكهربائية، أو هندسة الحاسبات والنظم بحيث يتيسر لهم متابعة التقدم المطرد في مجالات تطبيقات الهندسة الكهربائية وهندسة الحاسبات.
 - إن المهندس هو شخص متميز يحتاج إلى المعرفة رفيعة المستوى في جميع أفرع العلوم بما يعينه على اتخاذ القرارات السليمة. يهدف البرنامج إلى تطوير قدرات الطلاب بصورة تمكنهم من حل المسائل أو المشاكل التي تواجههم مع التزامهم بالنظر إلى كافة الجوانب البيئية والأخلاقية والاجتماعية فضلاً عن أخذهم الأمور التقنية بعين الاعتبار.
 - يجتهد البرنامج التعليمي في تمكين الطلاب من التصرف كجزء من فريق عمل، وفي تهيئتهم للتعليم المستمر طيلة حياتهم المهنية.
 - يسعى البرنامج لتزويد الطلاب بمهارات مهنية دقيقة التخصص موجهة إلى واحد من الأفرع أو المسارات التالية:
 ١. هندسة القوى والآلات الكهربائية.
 ٢. هندسة الإلكترونيات والاتصالات الكهربائية.
 ٣. هندسة الحاسبات والنظم.
 - يستهدف البرنامج تطوير مقدرة الطالب على تمييز وتعريف وتحليل وحل مسائل هندسة كهربائية مركبة أو معقدة وذات طبيعة عملية تغطي مدى واسعاً من الاهتمامات في المجال.
 - يسعى البرنامج لتعريف الطالب بالمبادئ والمعارف الخاصة بالأجهزة وتصميم النظام ومشاكل التشغيل.

٤- دور القسم في خدمة الجامعة والمجتمع

- المشاركة في مشروعات مركز الاستشارات الهندسية.
- المشاركة في الأعمال الاستشارية الخاصة بمحافظة كفر الشيخ.

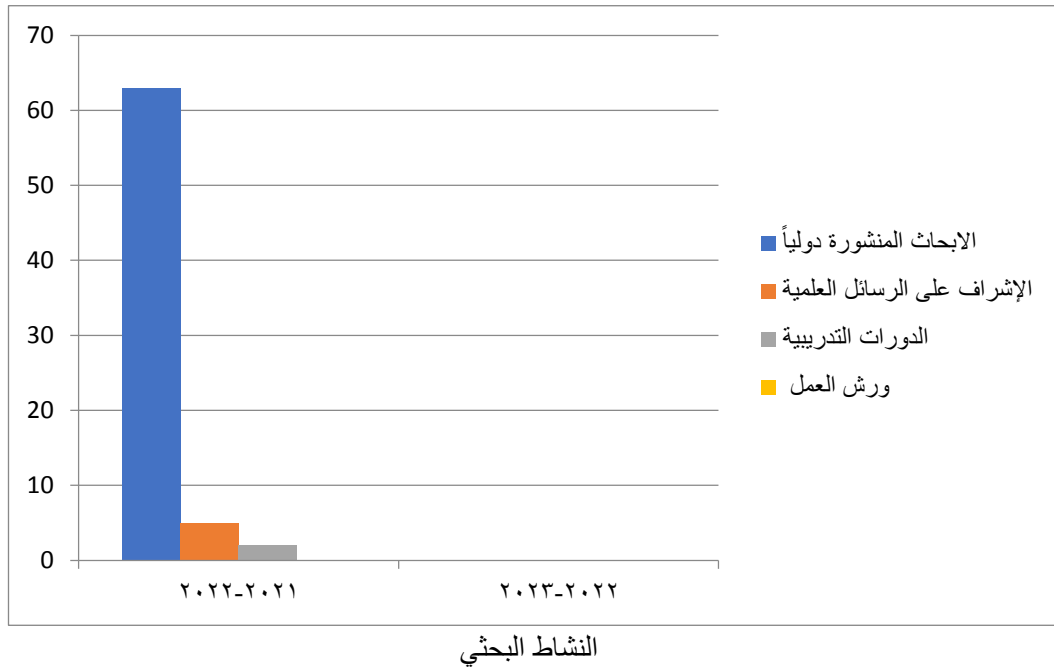
- عضوية ٣ أعضاء هيئة التدريس بالقسم في جمعية كفاءة الطاقة (أ.د.إ/ هاني أحمد عبد السلام- أ.م.د./ إيمان سعد عبد النبي- أ.م.د./ فتح الله فريخ سلامه سليم)
- تولى أ.د.إ/ هاني أحمد عبد السلام منصب منسق مدير مكتب العلاقات الدولية بالجامعة.

٥- إمكانيات القسم

- امكانيات قسم الهندسة الكهربائية تنقسم إلى:
- إمكانيات بشرية: تتمثل في أعضاء هيئة التدريس والهيئة المعاونة ومهندسي المعامل وكذلك الإداريين العاملين بالقسم .
 - إمكانيات مادية: تتمثل في معامل القسم وقاعات الدراسة.

٦- نشاط القسم وإنجازاته

- تتمثل أنشطة القسم في:
- العملية التعليمية: تجرى العملية التعليمية في قسم الهندسة الكهربائية خلال العام الجامعي ٢٠٢٢/٢٠٢٣ بنظام التواجد الكامل في الكلية.
 - النشاط البحثي لأعضاء هيئة التدريس و معاونيهم : بلغ عدد الابحاث المنشورة من أعضاء قسم الهندسة الكهربائية خلال عام ٢٠٢٣-٢٠٢٢ ٦٣ بحثاً حتى الآن بعد ان كان عددها ٦٣ بحثاً خلال عام ٢٠٢١.



٧- بيان بأسماء أعضاء هيئة التدريس في قسم الهندسة الكهربائية

م	الاسم	التخصص الدقيق	الدرجة العلمية	ملحوظات
١	آ.د/ عبد الفتاح عطية هليل	حاسبات	أستاذ	
٢	آ. د/ رجب عبد العزيز السحيمي	قوى	أستاذ	
٣	آ. د/ هاني أحمد عبد السلام	قوى	أستاذ	

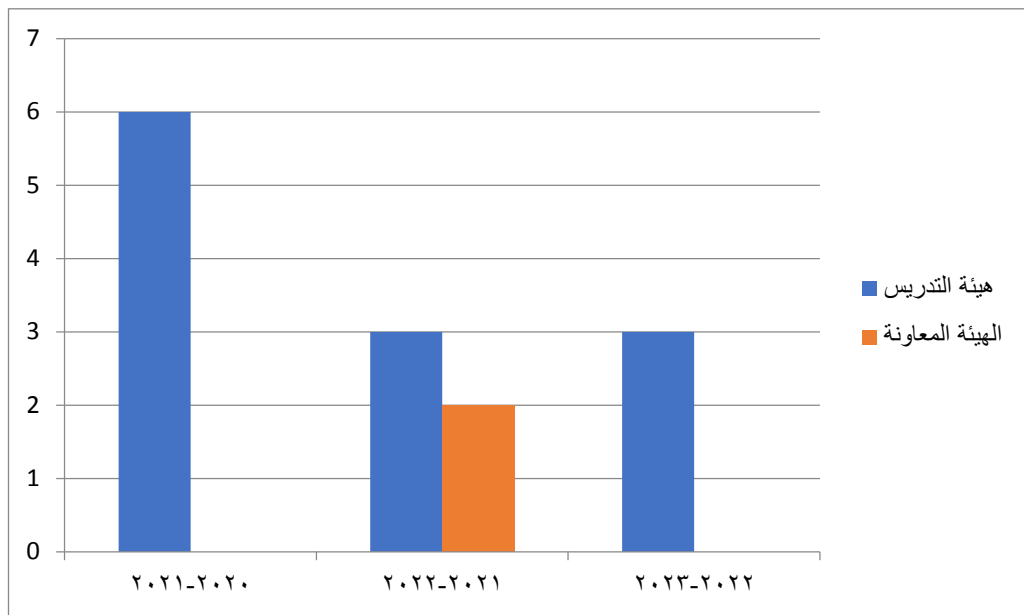
إجازة مرافقة زوجة	أستاذ	قوى	أ.د/زكريا محمد سالم البربري	٤
	أستاذ مساعد متفرغ	حاسبات	آ.م.د/ علي عبد الغفار صقر	٥
إجازة مرافقة زوجة	أستاذ مساعد	اتصالات	آ.م.د / د/بدير بدير يوسف ابو العنين	٦
	أستاذ مساعد	حاسبات	آ.م.د/ حمدي كمال المنير	٧
	أستاذ مساعد	قوى	آ.م.د/ ايمان سعد عبد النبي	٨
	أستاذ مساعد	حاسبات	آ.م.د/ تامر مدحت محمد	٩
	أستاذ مساعد	قوى	آ.م.د/ محمد ابراهيم عبد الونيس	١٠
	أستاذ مساعد	اتصالات	آ.م.د/ نهدي عبد السلام الشلبي	١١
	أستاذ مساعد	قوى	آ.م.د/ فتح الله فريخ سليم	١٢
	أستاذ مساعد	اتصالات	آ.م.د / ابراهيم فتحي العشري	١٣
	أستاذ مساعد	قوى	آ.م.د / أملاك اباطة الحريري	١٤
	مدرس	حاسبات	د / غادة مصطفى هميسة	١٥
	مدرس	اتصالات	د / شامية السيد الغمري	١٦
انتداب كلي	مدرس	قوى	د/ساميه غريب على عبد العال	١٧
اجازة مرافقة زوج	مدرس	اتصالات	د/إيمان فوزي أبو الخير	١٨
	مدرس	حاسبات	د / وسام محمد فكري	١٩
	مدرس	اتصالات	د/رنا عدلى راشد غلاب	٢٠
اجازة مرافقة زوجة	مدرس	قوى	د/محمد نبيل فتحى ابراهيم	٢١
مهمة علمية	مدرس	قوى	د / محمد بديع شفيق	٢٢
مهمة علمية	مدرس	قوى	د / علاء زكي حسين	٢٣
	مدرس	قوى	د/ مسعد محي الدين على يوسف عبد الله	٢٤
	مدرس	قوى	د/ منال محمد مصطفى عبدالله عماره	٢٥

٢٦	د/ هبة محمد جمال الدين	حاسبات	مدرس
٢٧	د / هبة ابراهيم البحيري	حاسبات	مدرس
٢٨	د / ولاء شوقي حمدون	قوى	مدرس
٢٩	د/ محمد عبد الرحمن ابراهيم جبر	قوى	مدرس

٨- بيان بأسماء اعضاء الهيئة المعاونة بالقسم

م	الاسم	التخصص الدقيق	الدرجة العلمية	ملحوظات
١	م / طارق يحيى عطية	قوى	مدرس مساعد	
٢	م/إيمان محمد رضا احمد البسيوني	حاسبات	مدرس مساعد	اجازة مرافقة زوجة
٣	م / دينا عادل محمد	حاسبات	مدرس مساعد	
٤	م/ نرمين جمال رزق	حاسبات	مدرس مساعد	
٥	م / ندى محمد معوض	حاسبات	مدرس مساعد	
٦	م/ رتيبة عبد الرحيم سالم عبد السيد	اتصالات	مدرس مساعد	اجازة مرافقة زوجة
٧	م / شروق جمعة عليوة	اتصالات	مدرس مساعد	
٨	م/ عبد الكريم صالح الحناوي	اتصالات	مدرس مساعد	اجازة دراسية
٩	م / شيما احمد زلط	قوى	معيد	
١٠	م/ ايهاب محمد عطية	قوى	معيد	
١١	م/ محمد ابراهيم السيد المزين	قوى	معيد	
١٢	م/ عفاف صلاح علي	اتصالات	معيد	
١٣	م / صبري حسني عبد الجواد	حاسبات	معيد	
١٤	م/ كامل محمد كامل محمد الصعدي	حاسبات	معيد	
١٥	م/ منة الله احمد حلمي محمد الزهبي	حاسبات	معيد	
١٦	م/ محمد علاء الدين محمد عبد الفتاح	قوى	معيد	

	معيد	قوى	م/ محمد عادل محمد ابو شادى السبيعي	١٧
	معيد	اتصالات	م/ ليلي محمد عبد القادريوسف احمد حامد	١٨
	معيد	حاسبات	م/ سلمى سامح ابراهيم فتحي محمد المغازى	١٩
تعيين في العام الجامعي ٢٠٢٢-٢٠٢٣	معيد	حاسبات	م/ آلاء سامي محمود حسن صحصاح	٢٠
	معيد	اتصالات	م/ أحمد عبديريه أبو المجد محمود	٢١
	معيد	قوى	م/ إبراهيم لبن	٢٢

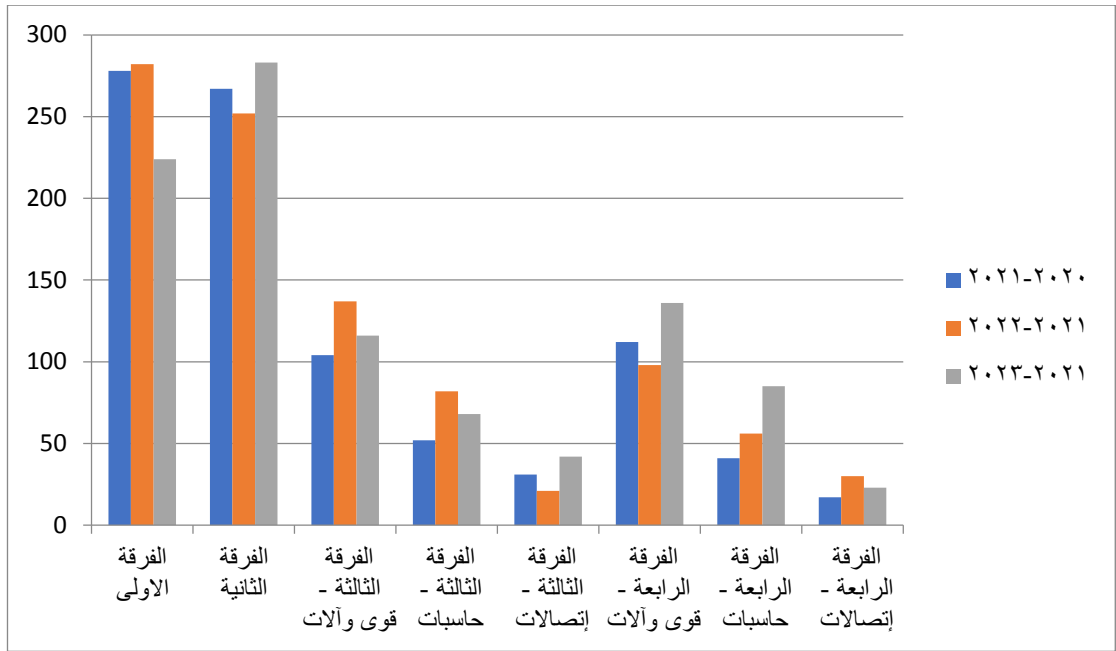


عدد الترقيات التي تمت لأعضاء هيئة التدريس والهيئة المعاونة

٩- بيان بأعداد طلاب القسم للعام الجامعي ٢٠٢٢/٢٠٢٣ م حسب اللوائح المعمول بها

الفرقة	الشعبة	اللائحة	عدد الطلاب الإجمالي
الاولى	عام	٢٠٠٧	٢٢٤
الثانية	عام	٢٠٠٧	٢٨٣
الثالثة	قوى	٢٠٠٧	١١٦

٦٨	٢٠٠٧	حاسبات	الثالثة
٤٢	٢٠٠٧	اتصالات	الثالثة
١٣٦	٢٠٠٧	قوى	الرابعة
٨٥	٢٠٠٧	حاسبات	الرابعة
٢٣	٢٠٠٧	اتصالات	الرابعة



مقارنة إجمالي أعداد الطلاب للعام الجامعي ٢٠٢٢-٢٠٢٣ والعامين الماضيين

١٠- الخطة التدريسية لقسم الهندسة الكهربائية ٢٠٢٢-٢٠٢٣ لمرحلة البكالوريوس:

● الفصل الدراسي الاول

● الفصل الدراسي الثاني

١١- الخطة البحثية للقسم

Research Plan of Electrical Engineering Department (٢٠٢٢-٢٠٢٧)

Research

The goal of the department is to provide students with a solid theoretical foundation combined with a good engineering ability. This is reflected in the research program which covers both theory and applications. The major research areas for the department branches are:

(a) Computer Engineering & Systems Branch

The research areas of Computer Engineering & Systems branch are:

Artificial Intelligence

- Deep Learning
- Neural Networks
- Fuzzy Logic applications
- Expert Systems
- Agents and Multi-agent Systems
- Natural Language Processing
- Data Mining
- Robotics

Security

- Biometrics
- Internet Security
- Intrusion Detection
- Web Services and Performance
- Secure Transactions
- Cryptography

Ambient Intelligence

- Networking
- Signal Processing
- Network Evolutions
- Communication Protocols
- Sensing and Sensor Networks
- Smart Healthcare
- Intelligent Transportation
- Agents and Multi-agent Systems

- ١) Image Captioning Based on Vision Transformer Models
- ٢) Prediction in Fractional Delayed Energy-Based Models
- ٣) Application of Generative Adversarial Networks and Deep Neural Networks

- ٤) Reduction of information systems
- ٥) Deep learning detection based on concatenated and recurrent modalities
- ٦) Application of Internet of Things
- ٧) Artificial intelligence applications
- ٨) Application on control systems

(b) Electrical Power and Machines Branch

The research areas of power systems and electrical machines branch are:

New and Renewable Energy:

- New and Renewable Energy Systems.
- Green Buildings.
- Energy Storage.
- Integration of New and Renewable Energy Resources in Power System.

Smart Grid:

- Smart Power Grid.
- Smart House.
- Multi-objective Optimization and Control of Smart Grid.
- Intelligent Control Application in Smart Grid.
- Distributed Generation and Microgrid in the Environment of Smart Grid.
- Wide Area Monitoring using Phasor Measurement Units (PMUs), Dynamic State Estimation, and Distributed Control of Power System.
- Internet of things (IoT) applications in Smart Power Grid.
- Applying Blockchain Technology to Power Systems.
- Application of Big Data in Electric Power Systems.

Electrical Machines:

- Optimal Operation and Performance of Electrical Machines.
- Optimal Design of Electrical Machines Using New Technique.
- Maximum Power Tracking of Renewable Energy.
- Control of Electrical Machine Using DSP and Microcontrollers.
- Modern drive system application.

Power Electronics:

- Power Electronics Applications in Electrical Machines.
- Power Electronics Applications in power systems.
- Power Electronics Applications in the New and Renewable Energy Systems.
- FACTS and HVDC Transmission Systems.
- Plug-in Electric Vehicles (PEVs).

High Voltage and Distribution Systems:

- Overcoming the disturbances in DG with and without renewable energy sources
- Predictive and preventive maintenance effects in electrical equipment operation and lifetime.
- Increasing the quality (efficiency- voltage drop...etc.) of HV/EHV T.L and cables
- Improvement of HV/EHV stations Protection under normal and abnormal conditions
- Study the medium/HV/EHV insulation operation under normal and abnormal conditions
- Increasing the insulation resistance (behavior) by different insulation materials combinations

- Renewable energy sources and economical applications.

Protection of networks, Applications and Evolving technologies

١. Micro-grids and islanded networks, effect of functional integration in IEDs on reliability, availability and maintainability
٢. Embedded and point-to-point DC interconnectors and networks
٣. Distribution and LV networks, system integrity and wide area protection
٤. Industrial networks, digital substations: protection aspects
٥. Transmission networks, new protection algorithms and software solutions
٦. Railway networks, condition monitoring and situational awareness – with focus on protection
٧. Performance aspects and weak networks, conventional and non-conventional instrument transformers
٨. Grid codes and policy / legislative issues that may impact on protection
٩. Protection of conventional generation systems and grid interconnections
١٠. Protection of renewable generation and grid interconnections
١١. Protection against network instability and low inertia
١٢. Transformer protection, design and application of substation communications and integrated systems
١٣. High impedance fault detection of over head and underground cable testing procedures and tools
١٤. Protection of energy storage and novel loads.

Power System Planning and Operation

Energy Pricing and Power Market Deregulation

Power Quality Study with Existing of Renewable Energy Resources and Nonlinear Loads

Power System Optimization

Artificial Intelligence Applications in Power Systems

(c) Electronics and Communications Branch

The research areas of Electronics and Communications are:

Optoelectronics:

- Nano optics and Nano electronics.
- Optical amplifiers.
- LASER applications in industry and medicine.
- Light sources and detectors

Photonics and Nanotechnology:

- Nanotechnology applications.
- Quantum dots: fabrications, characteristics and applications.
- Optical Nano antennas.
- Integrated Optics and optical fibers.

Optical communications:

- Optical communications networks.

- Optical computers and Optical measurements.

Antennas and microwaves:

- Computational Electromagnetic and microwaves.
- Plasma antennas.
- Leaky Wave Antennas.
- Reflect arrays and transmitter array.
- optical antennas.
- °G antennas

Digital communications:

- Digital communications networks.
- Mobile communication network.
- Cognitive radio network.
- WIMAX and WIFI network.
- Modulation techniques for °G and beyond

Security:

- Secure communication channels.
- Cryptography and cryptanalysis.
- Secure electronic fund transfer.
- Security in mobile communication.
- Cyber security
- Information security

١٢- الخطة التنفيذية للخطة البحثية لقسم الهندسة الكهربائية مايو ٢٠٢٣

النسبة	مؤشرات النجاح (المخرجات)			فتره التنفيذ	المسئول عن التنفيذ	الخطة التنفيذية للخطة البحثية بالقسم	المجالات البحثية في الخطة الاستراتيجية بالجامعة
	المراجع	رسائل ماجستير و دكتوراه	ابحاث في مؤتمرات ودوريات عالمية ذات معامل تاثير				
						١. New and Renewable Energy ٢. Electrical Machines	١- استخدامات الطاقة الشمسية
						٣. Intelligent control systems using soft computing methodologies ٤. Information Systems ٥. Security ٦. Image Processing ٧. Cloud Computing ٨. Pattern Recognition ٩. Virtual Reality ١٠. Information Systems	٢- هندسة البرمجيات
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		-					

		-			١١. Smart Grid ١٢. Electrical Machines ١٣. Power Electronics ١٤. High Voltage Engineering ١٥. Power System Protection ١٦. Power System Planning and Operation ١٧. Energy Pricing and Power Market Deregulation ١٨. Power Quality ١٩. Artificial Intelligence Applications in Power Systems	٣- هندسه القوي و الالات الكهربيه (يقترح اضافتها في الخطه الاستراتيجيه بالجامعه)
		-				
		-				
		-			٢٠. Optoelectronics ٢١. Photonics and Nanotechnology ٢٢. Optical communications ٢٣. Antennas and microwaves ٢٤. Digital communications ٢٥. Security	٤- هندسه الالكترونياات والاتصالات الكهربيه (يقترح اضافتها في الخطه الاستراتيجيه بالجامعه)
		-				
		-				

Published research work

- ١) A. F. Attia, "Online tuning based fuzzy logic controller for power system stabilizers," ٢٠١٧ Nineteenth International Middle East Power Systems Conference (MEPCON), Cairo, ٢٠١٧, pp. ٩٥٢-٩٥٧.
- ٢) Sallam, Elsayed, et al. "Handling Numerical Missing Values Via Rough Sets." International Journal of Mathematical Sciences and Computing (IJMSC) ٣.٢ (٢٠١٧): ٢٢-٣٦.
- ٣) Yuan, Xiaohui, et al. "A genetic algorithm-based, dynamic clustering method towards improved WSN longevity." Journal of Network and Systems Management ٢٥.١ (٢٠١٧): ٢١-٤٦.
- ٤) Wessam M. F. Abouzaid and Elsayed. A. Sallam , 'Implementation of Adaptive Neural Networks Controller for NXT SCARA Robot System' ٢٠١٧
- ٥) RAES Bachir Bentouati, Saliha Chettih, "An Efficient Chaotic Cuckoo Search Framework for Solving Non-convex Optimal Power Flow Problem", International Journal of Engineering research in Africa ٣٣, ٨٤-٨٩, ٢٠١٧
- ٦) AR Adly, RAE Sehiemy, AY Abdelaziz, "An optimal/adaptive reclosing technique for transient stability enhancement under single pole tripping", Electric Power Systems Research ١٥١, ٣٤٨-٣٥٨, ٢, ٢٠١٧
- ٧) A Atef, M Shebl, RE Sehiemy, F Bendary, "Static Transmission Expansion Planning for Realistic Networks in Egypt", Electric Power Systems Research ١٥١, ٤٠٤-٤١٨ ٢٠١٧
- ٨) MB Ragab A. El Sehiemy, Shady Abdel Aleem, Almoataz Abdelaziz, " A New Fuzzy Framework for the Optimal Placement of Phasor Measurement Units Under Normal and Abnormal Conditions", Resource-Efficient Technologies ٢٠١٧
- ٩) AAE Ela, RAE Sehiemy, AS Abbas, "Optimal placement and sizing of Distributed Generation and Capacitor Banks in Distribution Systems Using Water Cycle Algorithm", IEEE Systems Journal, ١-٨ ٢٠١٧

- ١٠) SA Amamra, H Ahmed, RA El-Sehiemy , “Firefly algorithm optimized robust protection scheme for DC microgrid”, Electric power component and systems ٤٥ (١٠), ١١٤١-١١٥١ ٢٠١٧
- ١١) B Bentouati, S Chettih, RAE Sehiemy, “A Chaotic Krill Herd Algorithm for Optimal Solution of the Economic Dispatch Problem”, International Journal of Engineering Research in Africa ٣١, ١٥٥-١٦٨ ٢٠١٧
- ١٢) B Bentouati, S Chettih, RAE Sehiemy, GG Wang, “Elephant Herding Optimization for Solving Non-convex Optimal Power Flow Problem”, Journal of Electrical and Electronics Engineering ١٠ (١), ١-٦ ٢٠١٧
- ١٣) AM Shaheen, RAE Sehiemy, SM Farrag, “ A Reactive Power Planning Procedure Considering Iterative Identification of VAR Candidate Buses”, Neural Computing & Applications, ١-٢٢ ٢٠١٧
- ١٤) AM Shaheen, RAE Sehiemy, “Optimal allocation of capacitor devices on MV distribution Networks using crow search algorithm”, ٢٤ th international conference on electricity distribution, CIRED ٢٠١٧ ٢٠١٧
- ١٥) AR Adly, AYA Ragab A. El Sehiemy, “Optimal Reclosing Time to Improve Transient Stability in Distribution System”, ٢٤th international Conference on Electricity Distribution, CIRED ٢٠١٧ ٢٠١٧
- ١٦) AR Adly, RA El Sehiemy, AY Abdelaziz, “A novel single end measuring system based fast identification scheme for transmission line faults”, Measurement ١٠٣, ٢٦٣-٢٧٤ ٢٠١٧
- ١٧) AM Shaheen, RA El-Sehiemy, SM Farrag, “Optimal reactive power dispatch using backtracking search algorithm”, Australian Journal of Electrical and Electronics Engineering ١٣ (٣), ٢٠٠-٢١٠ ٢٠١٧
- ١٨) Elhosseini, RA El Sehiemy, AH Salah, MA Abido, “Modeling and control of an interconnected combined cycle gas turbine using fuzzy and ANFIS controllers”, Electrical Engineering, ١-٢٣ ١ ٢٠١٧
- ١٩) AMA Walaa S. Sakr, Ragab A. EL-Sehiemy, “Adaptive Differential Evolution Algorithm for Efficient Reactive Power Management”, Applied Soft Computing ٥٣, ٣٣٦-٣٥١ ٣ ٢٠١٧
- ٢٠) AYA Ahmed R. Adly, Ragab A. El-Sehiemy, “A directional protection scheme during single pole tripping”, Electric Power Systems Research ١٤٤ (١), ١٩٧-٢٠٧ ٢٠١٧
- ٢١) GGW Rizk M. Rizk-Allah, Ragab A. El-Sehiemy, Suash Deb, “A novel fruit fly framework for multi-objective shape design of tubular linear motor”, The Journal of Supercomputing ٧٣ (٣), ١٢٣٥-١٢٥٠, ١ ٢٠١٧
- ٢٢) AM Shaheen, SM Farrag, RA El-Sehiemy, ” MOPF synchronous solution methodology”, IET Generation, Transmission & Distribution ١١ (٢), ٥٧٠ – ٥٨١ ٥ ٢٠١٧
- ٢٣) SAK Ahmed R. Adly, Ragab A. El-Sehiemy, Almoataz Y. Abdelaziz, “An Accurate Technique for Discrimination between Transient and Permanent Faults in Transmission Networks”, Electric power component and systems ٤٥ (٤), ٣٦٦-٣٨١ ٢٠١٧
- ٢٤) MNF Ibrahim, E Rashad, P Sergeant, “Performance Comparison of Conventional Synchronous Reluctance Machines and PM-Assisted Types with Combined Star-Delta Winding”, Energies ١٠ (١٠), ١٥٠٠ ٢٠١٧
- ٢٥) MN Ibrahim, AS Abdel-Khalik, EM Rashad, P Sergeant, “Comparison between two combined star-delta configurations on synchronous reluctance motors performance”, Electrical Machines and Systems (ICEMS), ٢٠١٧ ٢٠th International Conference ٢٠١٧
- ٢٦) MN Ibrahim, P Sergeant, EM Rashad, “Design of low cost and efficient photovoltaic pumping system utilizing synchronous reluctance motor”, Electric Machines and Drives Conference (IEMDC), ٢٠١٧ IEEE International, ١-٧ ٢٠١٧
- ٢٧) Mohamed Ibrahim, 'Design aspects of high performance synchronous reluctance machines with and without permanent magnets" Doctoral thesis, ٢٠١٧.
- ٢٨) WS Sakr, RA El-Sehiemy, AM Azmy, “Adaptive differential evolution algorithm for efficient reactive power management”, Applied Soft Computing ٥٣, ٣٣٦-٣٥١ ٣ ٢٠١٧.

- ٢٩) H. A. Abdelsalam, D. Suriyamongkol and E. B. Makram, "A TSA-based consideration to design LQR auxiliary voltage control of DFIG," ٢٠١٧ North American Power Symposium (NAPS), Morgantown, WV, ٢٠١٧, pp. ١-٦.
- ٣٠) H. A. Abdelsalam and I. F. Elashry, "A secure method to form microgrids for distribution feeder resiliency improvement," ٢٠١٧ North American Power Symposium (NAPS), Morgantown, WV, ٢٠١٧, pp. ١-٥.
- ٣١) M. I. Abdelwanis and F. Selim, "A sensorless six-phase induction motor driving a centrifugal pump system," ٢٠١٧ Nineteenth International Middle East Power Systems Conference (MEPCON), Cairo, ٢٠١٧, pp. ٢٤٢-٢٤٧.
- ٣٢) M. I. Abdelwanis and F. Selim, "A sensorless six-phase induction motor driving a centrifugal pump system," ٢٠١٧ Nineteenth International Middle East Power Systems Conference (MEPCON), Cairo, ٢٠١٧, pp. ٢٤٢-٢٤٧.
- ٣٣) Elbially, Samar, Bedir Yousif, and Ahmed Samra. "Modeling of active plasmonic coupler and filter based on metal-dielectric-metal waveguide." *Optical and Quantum Electronics* ٤٩,٤ (٢٠١٧): ١٤٥.
- ٣٤) B Yousif, M Elzalabani, NF Areed [Sensitivity maximization of leaky and weaky radiation micro/nano fiber sensors](#) - *Optical and Quantum Electronics*, ٢٠١٧
- ٣٥) Eslam Abd El-halim Farrag, Bedir B. Yousif, Ahmed S. Samra, ' PERFORMANCE EVALUATION OF InAs/InP (١١٣) B SELF-ASSEMBLED QUANTUM DOT LASERS' *Ciencia e Tecnica Vitivinicola*
- ٣٦) ibrahim El. Metwally, Bedir Yousif, Ahmed Shaban Samra, ' Implementation of an Optical CDMA Based Modified Walsh Code(MWC)' *INTERNATIONAL JOURNAL OF ELECTRONICS & DATA COMMUNICATION*
- ٣٧) H. M. Elattar, H. K. Elminir, A. M. Riad, "Towards online data-driven prognostics system", [Complex & Intelligent Systems](#) ٤ (٤), ٢٧١-٢٨٢ ٢٠١٨
- ٣٨) H. M. Elattar, H. K. Elminir, A. M. Riad, "Conception and implementation of a data-driven prognostics algorithm for safety-critical systems", *Soft Computing*, ١-١٨ ٢٠١٨
- ٣٩) AFA Attia, "[INTELLIGENT CONTROLLER FOR TRACKING A ١٤-INCH CELESTRON TELESCOPE](#)", *Acta Polytechnica* ٥٨ (٥), ٢٧١-٢٧٨ ٢٠١٨
- ٤٠) AAE Ela, RAE Sehiemy, AS Abbas, "[Optimal placement and sizing of Distributed Generation and Capacitor Banks in Distribution Systems Using Water Cycle Algorithm](#)", *IEEE Systems Journal* ١٢ (٤), ٣٦٢٩-٣٦٣٦ ٢٠١٨
- ٤١) RA El-Sehiemy, R Masoud, AF Attia, "[Assessment of hurricane versus sine-cosine optimization algorithms for economic /ecological emissions load dispatch problem](#)", *International Transactions on Electrical Energy Systems* ٢٠١٨
- ٤٢) AA Elsakaan, RA El-Sehiemy, SS Kaddah, MI Elsaid, "[An enhanced moth-flame optimizer for solving non-smooth economic dispatch problems with emissions](#)", *Energy* ١٥٧ (١), ١٠٦٣-١٠٧٨ ٢٠١٨
- ٤٣) RA El-Sehiemy, MI Abdelwaness, "[A Fuzzy-Based Controller of a Modified Six-Phase Induction Motor driving a Pumping system](#)", *Iranian Journal of Science and Technology - Transactions of Electrical* ٢٠١٨
- ٤٤) Attia, Abdel-Fattah, Ragab A. El Sehiemy, and Hany M. Hasanien. "Optimal power flow solution in power systems using a novel Sine-Cosine algorithm." *International Journal of Electrical Power & Energy Systems* ٩٩ (٢٠١٨): ٣٣١-٣٤٣.
- ٤٥) MIE Asmaa A. Elsakaan, Ragab A. El-Sehiemy, Sahar S. Kaddah, "[Economic Power Dispatch with Emission Constraint and Valve Point Loading Effect Using Moth Flame Optimization Algorithm](#)", *Advanced Engineering Forum* ٢٨ (١), ١٣٩-١٤٩ ٢٠١٨
- ٤٦) AF Barakat, RA El-Sehiemy, MI Elsaid, E Osman, "[Solving Reactive Power Dispatch Problem by Using JAYA Optimization Algorithm](#)", *International Journal of Engineering Research in Africa* ٣٦ (١), ١٢-٢٤ ٢٠١٨

- ٤٧) MA Elhosseini, RA El Sehiemy, AH Salah, MA Abido, “[Modeling and control of an interconnected combined cycle gas turbine using fuzzy and ANFIS controllers](#)”, Electrical Engineering ١٠٠ (٢), ٧٦٣-٧٨٥ ٢٠١٨
- ٤٨) AM Shaheen, RA El-Sehiemy, SM Farrag, “[Integrated strategies of backtracking search optimizer for solving reactive power dispatch problem](#)”, IEEE Systems Journal ١٢ (١), ٤٢٤-٤٣٣ ٢٠١٨
- ٤٩) SF A M Shaheen, Ragab El Sehiemy, “[Adequate Planning of Shunt Power Capacitors Involving Transformer Capacity Release Benefit](#)”, IEEE Systems Journal ١٢ (١), ٣٧٣ - ٣٨٢ ٢٠١٨
- ٥٠) B Bentouati, S Chettih, R El-Sehiemy, “[A Chaotic Firefly Algorithm Framework for Non-Convex Economic Dispatch Problem](#)”, Electrotehnica, Electronica, Automatica ٦٦ (١), ١٧٢-١٧٩ ٢٠١٨
- ٥١) RM Rizk-Allah, RA El-Sehiemy, “[A novel sine cosine approach for single and multiobjective emission/economic load dispatch problem](#)”, Innovative Trends in Computer Engineering (ITCE), ٢٠١٨ International ٢٠١٨
- ٥٢) AM Shaheen, RA El-Sehiemy, SM Farrag, “[A novel framework for power loss minimization by modified wind driven optimization algorithm](#)”, Innovative Trends in Computer Engineering (ITCE), ٢٠١٨ International ٢٠١٨
- ٥٣) RM Rizk-Allah, RA El-Sehiemy, GG Wang, “[A novel parallel hurricane optimization algorithm for secure emission/economic load dispatch solution](#)”, Applied Soft Computing ٦٣, ٢٠٦-٢٢٢ ٢٠١٨
- ٥٤) B Silwal, MN Ibrahim, P Sergeant, “[Synchronous Reluctance Machine: Combined Star-Delta Winding and Rotor Eccentricity](#)”, ٢٠١٨ XIII International Conference on Electrical Machines (ICEM), ٤٢٧-٤٣٢ ٢٠١٨
- ٥٥) MN Ibrahim, B Silwal, P Sergeant, “[Permanent Magnet-Assisted Synchronous Reluctance Motor Employing a Hybrid Star-Delta Winding for High Speed Applications](#)”, ٢٠١٨ XIII International Conference on Electrical Machines (ICEM), ٣٧٩-٣٨٥ ٢٠١٨
- ٥٦) MNF Ibrahim, AS Abdel-Khalik, EM Rashad, P Sergeant, “[An Improved Torque Density Synchronous Reluctance Machine With a Combined Star-Delta Winding Layout](#)”, IEEE Transactions on Energy Conversion ٣٣ (٣), ١٠١٥-١٠٢٤ ٢٠١٨
- ٥٧) H Sun, MJ Mnati, MN Ibrahim, A Van den Bossche, “[A Tuning Method for the Derivative Filter in PID Controller with Delay Time](#)”, ٢٠١٨ ٩th International Conference on Mechanical and Aerospace Engineering ٢٠١٨
- ٥٨) H Sun, MN Ibrahim, MJ Mnati, A Van den Bossche, “[A Tuning Method for PI Controller for an Integrating System with Time Delay](#)”, ٢٠١٨ ٩th International Conference on Mechanical and Aerospace Engineering ٢٠١٨
- ٥٩) B Silwal, MN Ibrahim, P Sergean, “[Performance of PM-Assisted Synchronous Reluctance Machine Under Rotor Eccentricity](#)”, ٢٠١٨ International Symposium on Power Electronics, Electrical Drives ٢٠١٨
- ٦٠) H Sun, A Farzan Moghaddam, MJM Al-Rubaye, AHR Mohamed, “[A Control Method with Ring Structure for Switched Reluctance Motor](#)”, the ٥th edition of the International Conference on Electrical Systems for ٢٠١٨
- ٦١) B Wymeersch, L Vandeveld, F De Belie, MNF Ibrahim, CB Rasm, “[Comparison Between Different Modelling Methods to study the Dynamical Behaviour of Line Start Permanent Magnet Synchronous Motors](#)”, <https://biblio.ugent.be/publication/٨٥٧٥٢٤٠> ٢٠١٨
- ٦٢) MM Savino, M Shafiq, “[An extensive study to assess the sustainability drivers of production performances using a resource-based view and contingency analysis](#)”, Journal of Cleaner Production ٢٠٤, ٧٤٤-٧٥٢ ٢٠١٨
- ٦٣) S Nisar, M Shafiq, “[Framework for efficient utilisation of social media in Pakistan's healthcare sector](#)”, Technology in Society ٢٠١٨

- ٦٤) Z Ahmad, SR Ahmad, N Sheikh, A Bukhari, A Tahir, M Shafiq, N Jamil, "[Advent of Molecular Taxonomy and its Application](#)", Global Journal of Animal Scientific Research ٦ (٢) ٢٠١٨
- ٦٥) F Mushtaq, M Shafiq, MM Savino, T Khalid, M Menanno, A Fahad, "[Reverse Logistics Route Selection Using AHP: A Case Study of Electronics Scrap from Pakistan](#)", IFIP International Conference on Advances in Production Management Systems, ٣-١٠ ٢٠١٨
- ٦٦) MU Akhtar, MH Raza, M Shafiq, "[Role of batch size in scheduling optimization of flexible manufacturing system using genetic algorithm](#)", Journal of Industrial Engineering International, ١-١٢ ٢٠١٨
- ٦٧) M Shafiq, WB Nisar, MM Savino, Z Rashid, Z Ahmad, "[Monitoring and controlling of unaccounted for gas \(UFG\) in distribution networks: A case study of Sui Northern Gas Pipelines Limited Pakistan](#)", IFAC-PapersOnLine ٥١ (١١), ٢٥٣-٢٥٨ ٢٠١٨
- ٦٨) PJ Siddique, HT Luong, M Shafiq, "[An optimal joint maintenance and spare parts inventory model](#)", International Journal of Industrial and Systems Engineering ٢٩ (٢), ١٧٧-١٩٢ ٢٠١٨
- ٦٩) B Yousif, IE Metwally, AS Samra, "[A modified topology achieved in OFDM/SAC-OCDMA-based multi-diagonal code for enhancing spectral efficiency](#)", Photonic Network Communications ٣٧ (١), ١٠ ٢٠١٨
- ٧٠) EE Elsayed, BB Yousif, MM Alzalabani, "[Performance enhancement of the power penalty in DWDM FSO communication using DPPM and OOK modulation](#)", Optical and Quantum Electronics ٥٠ (٧), ٢٨٢ ٢٠١٨
- ٧١) MB Shafik, H Chen, GI Rashed, R. A . El-Sehiemy, M ElKadeem , "Adequate Topology for Efficient Energy Resources Utilization of Active Distribution Networks Equipped With Soft Open Points ", IEEE Access ٧ (١), ٩٩٠٠٣-٩٩٠١٦, ٢٠١٩.
- ٧٢) M Hamidea MWaness, RA ElSehiemy , "Parameter estimation of poly-phase induction motors with experimental verification ", I Tra, ٢٠١٩
- ٧٣) Ragab A. El-Sehiemy et al. , "A novel multi-objective hybrid algorithm for efficient operation of power systems", Ene, ٢٠١٩
- ٧٤) Saliha Chettih and Ragab A. El Sehiemy Aboubakr Khelifi, Bachir Bentouati , "Application of Hybrid Salp Swarm Optimization Method for Solving OPF Problem", International Conference on Advanced Electrical Engineering, ٢٠١٩
- ٧٥) AA Elsakaan, RA El-Sehiemy, SS Kaddah, MI Elsaid, "Optimal economic/emission power scheduling of renewable energy resources in microgrids with uncertainty", IET Generation transmission distribution, ٢٠١٩
- ٧٦) Aboubakr KhelifiBachir, Bentouati Bachir, Chettih Saliha and Ragab A. El-Sehiemy, "A Novel Hybrid Method based on Krill Herd and Cuckoo Search for Optimal Power Flow Problem", International Journal of Image, Graphics and Signal Processing ١١ (٩), ١-١٧, ٢٠١٩
- ٧٧) Ragab A. El-Sehiemy Aboubkr Khelifi, Bachir Bentouati, Saliha Chettih,"A novel hybrid cuckoo search and krill herd technique for solving problem of optimal power flow in power systems", Journal of Electrical Systems ١٥ (٣), ٣٧٥-٣٩١, ٢٠١٩
- ٧٨) GHADA AMER, Fathy Mabrouk, Ragab El Sehiemy, "Sensitive/Stable Complementary Fault Identification Scheme for Overhead Transmission Lines, IET Generation, IET Generation, Transmission & Distribution ١٣ (١٥), ٣٢٥٢ – ٣٢٦٣, ٢٠١٩
- ٧٩) Abdullah M Shaheen, Ragab A El-Sehiemy, "Binary and Integer Coded Backtracking Search Optimization Algorithm for Transmission Network Expansion Planning", WSEAS TRANSACTIONS on POWER SYSTEMS, ٢٠١٩
- ٨٠) R El Sehiemy, AA El-Ela, AM Kinawy, E Salah, "Minimization of voltage fluctuation resulted from renewable energy sources uncertainty in distribution systems", IET Generation, Transmission & Distribution ١٣ (١٢), ٢٣٣٩ – ٢٣٥١ , ٢٠١٩.

- ٨١) F Jurado, SA el-sattar, SS Kamel, RE Sehiemy, J Yu, "Single- and multi-objective optimal power flow frameworks using Jaya optimization technique", Neural Computing and Applications, ١-٢٠, ٢٠١٩.
- ٨٢) MI Abdelwanis, RA Sehiemy, "Performance Enhancement of split-phase Induction Motor by using fuzzy-based PID controller", Journal of Electrical Engineering ٧٠ (٢), ١٠٣-١١٢, ٢٠١٩
- ٨٣) MB Shafik, GI Rashed, RA El-Sehiemy, H Chen, "Optimal Sizing and Siting of TCSC Devices for Multi-Objective Operation of Power Systems Using Adaptive Seeker Optimization Algorithm", ٢٠١٨ IEEE Region Ten Symposium (Tensymp) ١, ٢٣١-٢٣٦, ٢٠١٩
- ٨٤) MB Shafik, H Chen, GI Rashed, RA El-Sehiemy, "Adaptive multi objective parallel seeker optimization algorithm for incorporating TCSC devices into optimal power flow framework", IEEE Access ٧, ٣٦٩٣٤-٣٦٩٤٧, ٢٠١٩
- ٨٥) AR Adly, RA El Sehiemy, MA Elsadd, AY Abdelaziz, "A novel wavelet packet transform based fault identification procedures in HV transmission line based on current signals", International Journal of Applied Power Engineering ٨ (١), ١١-٢١, ٢٠١٩
- ٨٦) AM Shaheen, RA El-Sehiemy, SM Farrag, "A reactive power planning procedure considering iterative identification of VAR candidate buses", Neural Computing and Applications ٣١ (٣), ٦٧٤-٦٥٣, ٢٠١٩
- ٨٧) MI Abdelwanis, RA El-Sehiemy, "A Fuzzy-Based Controller of a Modified Six-Phase Induction Motor Driving a Pumping System, Iranian Journal of Science and Technology", Transactions of Electrical Engineering ١٥٣-١٦٥, ٢٠١٩
- ٨٨) MI Zaki, RA El-Sehiemy, GM Amer, FMA El Enin, "An investigated reactive power measurements-based fault-identification scheme for teed transmission lines", Measurement ١٣٦, ١٨٥-٢٠٠, ٢٠١٩
- ٨٩) AM Shaheen, RA El-Sehiemy, "Application of multi-verse optimizer for transmission network expansion planning in power systems", International Conference on Innovative Trends in Computer Engineering (ITCE) ٣٧١-٣٧٦, ٢٠١٩
- ٩٠) AF Barakat, RA El-Sehiemy, MI Elsayd, E Osman, "An enhanced Jaya optimization algorithm (EJOA) for solving multi-objective ORPD problem", International Conference on Innovative Trends in Computer Engineering (ITCE) ٤٧٩-٤٨٤, ٢٠١٩
- ٩١) MA Elhosseini, RA El Sehiemy, YI Rashwan, XZ Gao, "On the performance improvement of elephant herding optimization algorithm", Knowledge-Based Systems ١٦٦, ٥٨-٧٠, ٢٠١٩.
- ٩٢) RA El- Sehiemy, RM Rizk- Allah, AF Attia, "Assessment of hurricane versus sine- cosine optimization algorithms for economic/ecological emissions load dispatch problem", International Transactions on Electrical Energy Systems ٢٩ (٢), e٢٧١٦, ٢٠١٩.
- ٩٣) F Al-Tahhan, A Sakr, D Aladle, "M Fares, Improved image segmentation algorithms for detecting types of acute lymphatic leukemia", IET Image Processing, ٢٠١٩
- ٩٤) R Ghallab, M Shokair, A Sakr, AA El-Azam, "Inspection of Error Performance and Interference Avoidance Technique for Cooperative Relay in Underlay D2D Networks", ٣٦th National Radio Science Conference (NRSC) ١٩٠-١٩٩, ٢٠١٩
- ٩٥) R Ghallab, M Shokair, AA Elazm, A Sakr, W Saad, A Naguib, "Performance Enhancement Using MIMO Electronic Relay in Massive MIMO Cellular Networks, IET Networks, ٢٠١٩
- ٩٦) R Ghallab, AA Sakr, M Shokair, AA El-Azm, "Electronic relay performance in the inband device-to-device (D2D) communication system", Telecommunication Systems, ١-١١, ٢٠١٩
- ٩٧) HM Elattar, HK Elminir, AM Riad, "Conception and implementation of a data-driven prognostics algorithm for safety-critical systems", Soft Computing ٢٣ (١٠), ٣٣٦٥-٣٣٨٢, ٢٠١٩
- ٩٨) SA El-Ghany, HK Elminir, AM Riad, "An Improved Image Annotation and Retrieval System Using Hybrid Based Semantic and Context Data Analysis", International Conference on Computer and Information Sciences (ICCIS), ١-٥, ٢٠١٩

- ٩٩) HAA el-Ghany, MA Elsadd, ES Ahmed, "A faulted side identification scheme-based integrated distance protection for series-compensated transmission lines", International Journal of Electrical Power & Energy Systems ١١٣, ٦٦٤-٦٧٣, ٢٠١٩
- ١٠٠) B Yousif, MEA Abo-Elvoud, H Marouf, "Triangle grating for enhancement the efficiency in thin film photovoltaic solar cells", Optical and Quantum Electronics ٥١ (٢٧٦), ١-١١, ٢٠١٩
- ١٠١) bedir yousif, EE Elsayed, "Performance Enhancement of an Orbital-Angular Momentum-Multiplexed Free-Space Optical Link under Atmospheric Turbulence Effects Using Spatial Mode Multiplexing and Hybrid ...", IEEE Access, ١-١٥, ٢٠١٩
- ١٠٢) FG Hashad, O Zahran, ESM El-Rabaie, IF Elashry, FEA El-Samie, "Fusion-based encryption scheme for cancelable fingerprint recognition", Multimedia Tools and Applications, ١-٣١, ٢٠١٩
- ١٠٣) NM Moawad, WM Elawady, AM Sarhan, "Development of an adaptive radial basis function neural network estimator-based continuous sliding mode control for uncertain nonlinear systems", ISA transactions ٨٧, ٢٠٠-٢١٦, ٢٠١٩
- ١٠٤) KB Tawfiq, AS Mansour, MN Ibrahim, E EL-Kholy, P Sergeant, "Implementation of Matrix Converter in Wind Energy Conversion System with Modified Control Techniques", Electric Power Components and Systems, ١-١٦, ٢٠١٩
- ١٠٥) MN Ibrahim, H Rezk, M Al-Dhaifallah, P Sergeant, "Solar Array Fed Synchronous Reluctance Motor Driven Water Pump: An Improved Performance Under Partial Shading Conditions", IEEE Access ٧, ٧٧١٠٠-٧٧١١٥, ٢٠١٩
- ١٠٦) V Prakht, V Dmitrievskii, V Kazakbaev, S Oshurbekov, MN Ibrahim, "Optimal design of a novel three-phase high-speed flux reversal machine", Applied Sciences ٩ (١٨), ٣٨٢٢, ٢٠١٩
- ١٠٧) V Kazakbaev, V Prakht, V Dmitrievskii, MN Ibrahim, S Oshurbekov, ..., "Efficiency analysis of low electric power drives employing induction and synchronous reluctance motors in pump applications", Energies ١٢ (٦), ١١٤٤, ٢٠١٩
- ١٠٨) H Sun, AF Moghaddam, MJ Mnati, AH Mohamed, MN Ibrahim, "A Control Method with Ring Structure for Switched Reluctance Motor", ٢٠١٨ IEEE International Conference on Electrical Systems for Aircraft ..., ٢٠١٩.
- ١٠٩) Noha A. Al-Shalaby, Abdelkarim S. Elhenawy, Saber H. Zainud-Deen and Hend A. Malhat, "Electronic Beam-Scanning Strip-Coded Graphene Leaky-Wave Antenna Using Single Structure" ٠٦ March ٢٠٢١ Plasmonics.
- ١١٠) Hend A. Malhat, Abdelkarim S. Elhenawy, Saber H. Zainud-Deen and Noha A. El-Shalaby, "١- D reconfigurable graphene- strips leaky- wave antenna with different feeders for wide scanning angles", ١٠ April ٢٠٢١, international journal of RF AND MICROWAVE COMPUTER AIDED ENGINEERING. <https://doi.org/10.1002/mmce.22683> Version of Record online: ١٠ April ٢٠٢١.
- ١١١) S. M. Gaber, N. A. El-Shalaby and H.A. Malhat " Dual-Band Antenna Array with Reduced Mutual-Coupling for Wearable Wireless Communication Applications" Wireless Personal Communications, springer, Vol., No.. Pp.١-, July, ٢٠٢١.
- ١١٢) A. S. Elhenawy, N. A. Al-Shalaby, S. H. Zainud-Deen and H. A. Malhat, "Reconfigurable Plasma ٢D Circles Leaky Wave Antenna," ٢٠٢١ ٣٨th National Radio Science Conference (NRSC), ٢٠٢١, pp. ٨-١٥, doi: ١٠.١١٠٩/NRSC٥٢٢٩٩.٢٠٢١.٩٥٠٩٨٢٢.
- ١١٣) Cavity Design and Optimization of Hybrid Quantum Dot Organic Light Emitting Devices for Blue Light Emission, IE Shaaban, AS Samra, B Yousif, NA Alghamdi, S El-Sherbiny, S Wageh, Journal of Nanoelectronics and Optoelectronics ١٥ (١١), ١٣٦٤-١٣٧٣, ٢٠٢٠.
- ١١٤) Eman Abouelkeir and Shamia El-Sherbiny, "A Pairing Free Identity Based Aggregate Signcryption Scheme, IET Information Security, April ٢٠٢٠
- ١١٥) Shamia El-Sherbiny and Swelm Wageh, Field enhancement of optical bowtie nano-antenna using exponential tapered profile, IET Optoelectronics (Volume: ١٤ , Issue: ٢ , ٤ ٢٠٢٠)

- ١١٦) Elewa, Shorok, Bedir Yousif, and Mohy Eldin A. Abo-Elvoud. "Improving efficiency of perovskite solar cell using optimized front surface nanospheres grating." *Applied Physics A* ١٢٧, no. ١١ (٢٠٢١): ١-١٤.
- ١١٧) Elewa, Shorok, Bedir Yousif, and Mohy Eldin A. Abo-Elvoud. "Efficiency enhancement of intermediate band solar cell using front surface pyramid grating." *Optical and Quantum Electronics* ٥٣, no. ٧ (٢٠٢١): ١-١٨.
- ١١٨) Faragallah, Osama S., Ensherah A. Naeem, Walid El-Shafai, Noha Ramadan, Hossam El-din H. Ahmed, Mustafa M. Abd Elnaby, Ibrahim Elashry, Said E. El-khamy, and Fathi E. Abd El-Samie. "Efficient chaotic-Baker-map-based cancelable face recognition." *Journal of Ambient Intelligence and Humanized Computing* (٢٠٢١): ١-٣٩.
- ١١٩) Faragallah, Osama S., Walid El-Shafai, Ashraf Afifi, Ibrahim Elashry, Mohammed A. AlZain, Jehad F. Al-Amri, Ben Soh, M. Heba, Hala S. El-Sayed, and Fathi E. Abd El-Samie. "Efficient three-dimensional video cybersecurity framework based on double random phase encoding." *Intelligent Automation & Soft Computing* ٢٨, no. ٢ (٢٠٢١): ٢٥٣-٣٦٧.
- ١٢٠) Faragallah, Osama S., Ashraf Afifi, Ibrahim F. Elashry, Ensherah A. Naeem, Heba M. El-Hoseny, Hala S. El-sayed, and Alaa M. Abbas. "Efficient optical double image cryptosystem using chaotic mapping-based Fresnel transform." *Optical and Quantum Electronics* ٥٣, no. ٦ (٢٠٢١): ١-٢٦.
- ١٢١) Elashry, IbAlajmi, Masoud, Ibrahim Elashry, Hala S. El-Sayed, and Osama S. Faragallah. "A password-based authentication system based on the CAPTCHA AI problem." *IEEE Access* ٨ (٢٠٢٠): ١٥٣٩١٤-١٥٣٩٢٨.
- ١٢٢) rahim. "Cryptanalysis of Jain-Singh's identity-based RSA encryption." *Information Security Journal: A Global Perspective* ٣٠, no. ١ (٢٠٢١): ٥٧-٦١.
- ١٢٣) Hashad, Fatma G., O. Zahran, S. El-Rabaie, Ibrahim F. Elashry, Ghada Elbanby, Moawad I. Dessouky, Abd El-Samie, and E. Fathi. "Cancelable Fingerprint Recognition based on Encrypted Convolution Kernel in Different Domains." *Menoufia Journal of Electronic Engineering Research* ٢٩, no. ٢ (٢٠٢٠): ١٣٣-١٤٢.
- ١٢٤) Naeem, Ensherah A., Ayman EA Abdelaal, Asmaa A. Eyssa, Faten Maher Al_azrak, Rania A Ahmed, Emad S. Hassan, Ibrahim F. Elashry et al. "Efficient signal and protocol level security for network communication." *International Journal of Speech Technology* ٢٣, no. ٢ (٢٠٢٠): ٣٩٩-٤٢٤.
- ١٢٥) Alajmi, Masoud, Ibrahim Elashry, Hala S. El-Sayed, and Osama S. Farag Allah. "Steganography of encrypted messages inside valid QR codes." *IEEE Access* ٨ (٢٠٢٠): ٢٧٨٦١-٢٧٨٧٣.
- ١٢٦) Elashry, Ibrahim F., Walid El-Shafai, Emad S. Hasan, S. El-Rabaie, Alaa M. Abbas, Abd El-Samie, E. Fathi, Hala S. El-sayed, and Osama S. Faragallah. "Efficient chaotic-based image cryptosystem with different modes of operation." *Multimedia Tools and Applications* ٧٩, no. ٢٩ (٢٠٢٠): ٢٠٦٦٥-٢٠٦٨٧.
- ١٢٧) Hashad, Fatma G., Osama Zahran, El-Sayed M. El-Rabaie, Ibrahim F. Elashry, Abd El-Samie, and E. Fathi. "Fusion-based encryption scheme for cancelable fingerprint recognition." *Multimedia Tools and Applications* ٧٨, no. ١٩ (٢٠١٩): ٢٧٣٥١-٢٧٣٨١.
- ١٢٨) F. Selim, Almoataz Abdelaziz, Ibrahim B. M. Taha, Economic Design of Hybrid Pico-Hydraulic/Photovoltaic Generation System: A Case Study in Egypt, MDPI, *Electronics* ٢٠٢١, ١٠, ٢٩٤٧. <https://doi.org/10.3390/electronics10232947>.
- ١٢٩) Mohamed I. Abdelwanis, Essam M. Rashad, Ibrahim B. M. Taha, Fathalla F. Selim, Implementation and Control of Six-Phase Induction Motor Driven by a Three-Phase Supply, MDPI, *Energies* ٢٠٢١, ١٤, ٧٧٩٨. <https://doi.org/10.3390/en14227798>.
- ١٣٠) Mohamed E. Ibrahim, F. Selim and Amr M. Abd-Elhad, Partial Discharge Performance Improvement of Covered Conductor (CC)/High Voltage Insulator Based Electrical Distribution

- Systems, Electric Power Systems Research Journal, Seb. ٢٠٢١.
<https://doi.org/10.1016/j.epsr.2021.107601>
- ١٣١) F. Selim, S. M. Elkholy and Ahmed F. Bendary, A New trend for indoor lighting design based on a hybrid methodology, International Journal of Daylighting, ٢٠٢٠; Vol ٧ (٢):١٣٧-١٥٣.
<https://doi.org/10.10627/jd.2020.14>
- ١٣٢) Ragab A. El Sehiemy, F. Selim, Bachir Bentouati and M.A. Abido "A novel multi-objective hybrid particle swarm and salp optimization algorithm for technical-economical-environmental operation in power systems", Energy ٢٠٢٠, ١٩٣, ١١٦٨١٧.
<https://doi.org/10.1016/j.energy.2019.116817>
- ١٣٣) Abdel-Fattah Attia, Adel Mahmoud Sharaf and F. Selim "A Multi-Stage Fuzzy Logic Controller for Hybrid-AC Grid-Battery Charging Drive System, Turk J Electronic Energy ٢٠١٩, ٤(٢); pp.١-١٢.
<https://sloi.org/urn:sl:tjoe:42142>.
- ١٣٤) F. Selim, Mohamed I. Abdelwanis " Optimal Operation of Synchronous Motor Using Particle Swarm Optimization and Jaya Techniques", ٢١st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, December ٢٠١٩.
- ١٣٥) F. Selim, Mohamed I. Abdelwanis " A Newly On-Time Following Up Electrical Earthing System Technology", ٢١st International Middle East Power Systems Conference (MEPCON), Tanta University, Egypt, December ٢٠١٩.*****
- ١٣٦) Ahmed A. Zaki Diab, Hamdi Ali, H.I. Abdul-Ghaffar, Hany A. Abdelsalam, Montaser Abd El Sattar, "Accurate parameters extraction of PEMFC model based on metaheuristics algorithms," Energy Reports, Volume ٧, ٢٠٢١, Pages ٦٨٥٤-٦٨٦٧.
- ١٣٧) Ahmed Diab, Abdelsalam A. Abdelsalam, and Hany A. Abdelsalam, "Fuzzy-based Adaptive Sliding Mode Control for a Direct-Driven PMSG Wind Energy System", The ٢١th International Middle East Power Systems Conference, MEPCON'١٩, Cairo, Egypt, December ٢٠١٩.
- ١٣٨) M. M. Emara, G. D. Peppas and I. F. Gonos, "Two Graphical Shapes Based on DGA for Power Transformer Fault Types Discrimination," in IEEE Transactions on Dielectrics and Electrical Insulation, vol. ٢٨, no. ٣, pp. ٩٨١-٩٨٧, June ٢٠٢١, doi: 10.1109/TDEI.2021.009410.
- ١٣٩) Emara, M. M., et al. "Lightning impulse performance of natural ester oil based nanofluid with magnesium oxide nanoparticles." (٢٠٢١): ١٥٩٣-١٥٩٦.
- ١٤٠) M. M. Emara et al., "Thermal and Electrical Conductivities for Ester Oil Based Graphene Nana-sheets," ٢٠٢٠ IEEE International Conference on High Voltage Engineering and Application (ICHVE), ٢٠٢٠, pp. ١-٤, doi: 10.1109/ICHVE49031.2020.9279600.
- ١٤١) M. M. Emara, D. -E. A. Mansour and A. M. Azmy, "Mitigating the impact of aging byproducts in transformer oil using TiO₂ nanofillers," in IEEE Transactions on Dielectrics and Electrical Insulation, vol. ٢٤, no. ٦, pp. ٣٤٧١-٣٤٨٠, Dec. ٢٠١٧, doi: 10.1109/TDEI.2017.006086.
- ١٤٢) M. M. Emara, D. -E. A. Mansour and A. M. Azmy, "Dielectric properties of aged mineral oil filled with TiO₂ nanoparticles," ٢٠١٥ ٤th International Conference on Electric Power and Energy Conversion Systems (EPECS), ٢٠١٥, pp. ١-٥, doi: 10.1109/EPECS.2015.7367803.
- ١٤٣) Hossam A. Abd El-Ghany, Eman Saad Ahmed and Ahmed Elsayed Elgebaly "A Reliable Loss of Excitation Protection Technique based on EPFA for Synchronous Generators" IEEE Transactions on Power Delivery, June ٢٠٢١.
- ١٤٤) Ahmed Elsayed Elgebaly, Ibrahim B M Taha, Eman Saad Ahmed and Hossam A. Abd El-Ghany "Generalized voltage estimation of TCSC-compensated transmission lines for adaptive distance protection" International Journal of Electrical Power & Energy Systems, April ٢٠٢١.
- ١٤٥) Hamdy Aboelkhair, Eman Saad Ahmed and Diao-Eldin A. Mansour" Development of Wide Area Protection Scheme Based on Power Measurements" ١٢th International Conference on Electrical Engineering, (ICEENG)July ٢٠٢٠.

- ١٤٦) Mohamed I. Abdelwanis, Amlak Abaza, Ragab A. El-Sehiemy, Mohamed N. Ibrahim and Hegazy Rezk, "Parameter Estimation of Electric Power Transformers Using Coyote Optimization Algorithm with Experimental Verification," IEEE Access, vol ٨, pp. ٥٠٠٣٦-٥٠٠٤٤, ٢٠٢٠.
- ١٤٧) M. I. Abdelwanis, R. A. Sehiemy, and M. A. Hamida, "Hybrid optimization algorithm for parameter estimation of poly-phase induction motors with experimental verification," Energy AI, vol. ٥, no. ١٠٠٠٨٣, pp. ١-١٥, ٢٠٢١, doi: ١٠.١٠١٦/j.egyai.٢٠٢١.١٠٠٠٨٣.
- ١٤٨) Mohamed I. Abdelwanis, Essam M. Rashad, Ibrahim B.M. Taha, and Fathalla F. Selim. "Implementation and Control of Six-Phase Induction Motor Driven by a Three-Phase Supply" Energies ١٤, no. ٢٢: ٧٧٩٨, ٢٠٢١. <https://doi.org/10.3390/en14227798>
- ١٤٩) Sakr, Walaa S., Ragab A. EL-Sehiemy, Ahmed M. Azmy, and Hossam A. Abd el-Ghany. "Identifying optimal border of virtual power plants considering uncertainties and demand response." Alexandria Engineering Journal ٦١, no. ١٢ (٢٠٢٢): ٩٦٧٣-٩٧١٣.
- ١٥٠) Sakr, W. S., Hossam A. Abd el-Ghany, Ragab A. EL-Sehiemy, and Ahmed M. Azmy. "A day-ahead optimal rescheduling approach for virtual power plants considering different loading conditions." In ٢٠١٩ ٢١st International Middle East Power Systems Conference (MEPCON), pp. ٧٨٤-٧٨٩. IEEE, ٢٠١٩.
- ١٥١) Sakr, Walaa S., Hossam A. Abd el-Ghany, Ragab A. EL-Sehiemy, and Ahmed M. Azmy. "Techno-economic assessment of consumers' participation in the demand response program for optimal day-ahead scheduling of virtual power plants." Alexandria Engineering Journal ٥٩, no. ١ (٢٠٢٠): ٣٩٩-٤١٥.
- ١٥٢) Xu, Wei, Mosaad M. Ali, Mahmoud F. Elmorshedy, Said M. Allam, and Chaoxu Mu. "One improved sliding mode DTC for linear induction machines based on linear metro." IEEE Transactions on Power Electronics ٣٦, no. ٤ (٢٠٢٠): ٤٥٦٠-٤٥٧١.
- ١٥٣) Ali, Mosaad M., Wei Xu, Mahmoud F. Elmorshedy, Yi Liu, Said M. Allam, and Minghai Dong. "Sliding mode speed regulation of linear induction motors based on direct thrust control with space-vector modulation strategy." In ٢٠١٩ ٢٢nd International Conference on Electrical Machines and Systems (ICEMS), pp. ١-٦. IEEE, ٢٠١٩.
- ١٥٤) Ali, Mosaad Mohiedden, SAID ALLAM, and Talaat Hamdan Abdel-Moneim. "Dynamic characteristics of an isolated self-excited synchronous reluctance generator driven by a wind turbine." Turkish Journal of Electrical Engineering and Computer Sciences ٢٤, no. ٦ (٢٠١٦): ٥٢٣٨-٥٢٥٠.
- ١٥٥) Ali, Mosaad M., Wei Xu, Mahmoud F. Elmorshedy, Yi Liu, and Minghai Dong. "An improved finite-set model predictive current control with nonlinear speed regulator for linear induction machine based on linear metro." In ٢٠٢٠ IEEE Energy Conversion Congress and Exposition (ECCE), pp. ٥١٤١-٥١٤٧. IEEE, ٢٠٢٠.
- ١٥٦) Elmorshedy, Mahmoud F., Wei Xu, Yi Liu, Said M. Allam, Mosaad M. Ali, and Minghai Dong. "Sensorless direct thrust control of a linear induction motor based on MRAS." In ٢٠١٩ ١٢th International Symposium on Linear Drives for Industry Applications (LDIA), pp. ١-٦. IEEE, ٢٠١٩.
- ١٥٧) Hamad, Samir A., Wei Xu, Mahmoud F. Elmorshedy, and Mosaad M. Ali. "Improved Model Predictive Flux Control of Linear Induction Machine Applied for Linear Metro." In ٢٠٢٠ ٢٣rd International Conference on Electrical Machines and Systems (ICEMS), pp. ١٢٨٠-١٢٨٥. IEEE, ٢٠٢٠.
- ١٥٨) Ali, Mosaad M., Wei Xu, Abdul Khaliq Junejo, Mahmoud F. Elmorshedy, and Yirong Tang. "One new super-twisting sliding mode direct thrust control for linear induction machine based on linear metro." IEEE Transactions on Power Electronics ٣٧, no. ١ (٢٠٢١): ٧٩٥-٨٠٥.
- ١٥٩) Elmorshedy, Mahmoud F., Wei Xu, Mosaad M. Ali, Yi Liu, and Said M. Allam. "High performance speed sensorless finite-set predictive thrust control of a linear induction motor based on MRAS and fuzzy logic controller." In ٢٠٢٠ IEEE ٩th International Power Electronics and Motion Control Conference (IPEMC٢٠٢٠-ECCE Asia), pp. ٣٠٣٩-٣٠٤٤. IEEE, ٢٠٢٠.

- ١٦٠) Dabour, Sherif, M. E. A. Farrag, Azmy Gowaid, Mahmoud F. Elmorshedy, Mosaad M. Ali, and Dhafer Almakhles. "Improved responses of grid connected Quadratic Boost Inverter based on super-twisting sliding mode control." In ٤٨th Annual Conference of the Industrial Electronics Society IECON ٢٠٢٢ Conference. ٢٠٢٢.
- ١٦١) Xu, Wei, Samir A. Hamad, Syed Arslan Bukhari, Mahmoud F. Elmorshedy, Mosaad M. Ali, and Ahmed Diab. "Thrust Ripple Suppression for Linear Induction Machines Based on Improved Finite Control Set-Model Predictive Voltage Control." IEEE Transactions on Industry Applications (٢٠٢٢).
- ١٦٢) Elmorshedy, Mahmoud F., Said M. Allam, and Mosaad M. Ali. "A Proposed High-Performance Wind-Driven Doubly-Fed Induction Generator Based on Super-Twisting Sliding Mode Control for Rural Areas Applications." In ٢٠٢١ ٢٢nd International Middle East Power Systems Conference (MEPCON), pp. ٥١-٥٧. IEEE, ٢٠٢١.
- ١٦٣) Hamad, Samir A., Wei Xu, Yi Liu, Mosaad M. Ali, Moustafa Magdi Ismail, and Jose Rodriguez. "Improved MPCC with Duty Cycle Modulation Strategy for Linear Induction Machines based on Linear Metro." In ٢٠٢١ IEEE International Conference on Predictive Control of Electrical Drives and Power Electronics (PRECEDE), pp. ٣٥-٤٠. IEEE, ٢٠٢١.
- ١٦٤) Elmorshedy, Mahmoud F., Md Rabiul Islam, Mosaad M. Ali, Fayez FM El-Sousy, and Mahmoud M. Amin. "Improved Standalone PMSG based Wind-Generating System Using MPPT and MRAS for Speed Estimation." In ٢٠٢١ IEEE ٤th International Conference on Computing, Power and Communication Technologies (GUCON), pp. ١-٦. IEEE, ٢٠٢١.
- ١٦٥) Elmorshedy, Mahmoud F., Wei Xu, Mosaad M. Ali, and Syed Arslan Bukhari. "Speed Regulation of Linear Induction Motor with Finite State Predictive Thrust Control Based on Sliding Mode Controller." In ٢٠٢١ ١٣th International Symposium on Linear Drives for Industry Applications (LDIA), pp. ١-٦. IEEE, ٢٠٢١.
- ١٦٦) Hamad, Samir A., Wei Xu, Ahmed Diab, Mosaad M. Ali, and Syed Arslan Bukhari. "Model Predictive Voltage Control for Linear Induction Machine Without Weighting Factor." In ٢٠٢١ ١٣th International Symposium on Linear Drives for Industry Applications (LDIA), pp. ١-٦. IEEE, ٢٠٢١.
- ١٦٧) Ali, Mosaad M., Wei Xu, Mahmoud F. Elmorshedy, Samir A. Hamad, Abdul Khalique Junejo, and Moustafa Ismail. "Improved Drive Performance of Linear Induction Machine Based on Direct Thrust Control and Sliding Mode Control with Extended State Observer Applied for Linear Metro." In ٢٠٢١ ١٣th International Symposium on Linear Drives for Industry Applications (LDIA), pp. ١-٦. IEEE, ٢٠٢١.
- ١٦٨) Ali, Mosaad Mohiedden, SAID ALLAM, and Talaat Hamdan Abdel-Moneim. "Dynamic characteristics of an isolated self-excited synchronous reluctance generator driven by a wind turbine." Turkish Journal of Electrical Engineering and Computer Sciences ٢٤, no. ٦ (٢٠١٦): ٥٢٣٨-٥٢٥٠.
- ١٦٩) M. I. Abdelwanis, A. Abaza, R. A. El-Sehiemy, M. N. Ibrahim and H. Rezk, "Parameter Estimation of Electric Power Transformers Using Coyote Optimization Algorithm With Experimental Verification," in IEEE Access, vol. ٨, pp. ٥٠٠٣٦-٥٠٠٤٤, ٢٠٢٠.
- ١٧٠) A. Abaza, A. Fawzy, Ragab A. El-Sehiemy, Ali S. Alghamdi, Salah Kamel, "Sensitive reactive power dispatch solution accomplished with renewable energy allocation using an enhanced coyote optimization algorithm," Ain Shams Engineering Journal, vol. ١٢, Issue ٢, pp. ١٧٢٣-١٧٣٩, ٢٠٢١.
- ١٧١) A. Abaza, R. A. El-Sehiemy, K. Mahmoud, M. Lehtonen, and M. M. F. Darwish, "Optimal Estimation of Proton Exchange Membrane Fuel Cells Parameter Based on Coyote Optimization Algorithm," Applied Sciences, vol. ١١, no. ٥, p. ٢٠٥٢, Feb. ٢٠٢١.
- ١٧٢) A. S. Bayoumi, R. A. El-Sehiemy and A. Abaza, "Effective PV Parameter Estimation Algorithm Based on Marine Predators Optimizer Considering Normal and Low Radiation Operating Conditions," Arabian Journal for Science and Engineering, August ٢٠٢١.

- ١٧٣) A. A. Zaky, A. Fathy, H. Rezk, K. Gkini, P. Falaras, and A. Abaza, "A Modified Triple-Diode Model Parameters Identification for Perovskite Solar Cells via Nature-Inspired Search Optimization Algorithms," *Sustainability*, vol. ١٣, no. ٢٣, p. ١٢٩٦٩, Nov. ٢٠٢١.
- ١٧٤) El Sehiemy, Ragab A., F. Selim, Bachir Bentouati, and M. A. Abido. "A novel multi-objective hybrid particle swarm and salp optimization algorithm for technical-economical-environmental operation in power systems." *Energy* ١٩٣ (٢٠٢٠): ١١٦٨١٧.
- ١٧٥) Barakat, Asmaa F., Ragab El-Sehiemy, and Mohamed Elsaid. "Close accord on particle swarm optimization variants for solving non-linear optimal reactive power dispatch problem." In *International Journal of Engineering Research in Africa*, vol. ٤٦, pp. ٨٨-١٠٥. Trans Tech Publications Ltd, ٢٠٢٠.
- ١٧٦) Elsakaan, Asmaa A., Ragab A. El- Sehiemy, Sahar S. Kaddah, and Mohammed I. Elsaid. "Optimal economic-emission power scheduling of RERs in MGs with uncertainty." *IET generation, transmission & distribution* ١٤, no. ١ (٢٠٢٠): ٣٧-٥٢.
- ١٧٧) Chenouard, Raphael, and Ragab A. El-Sehiemy. "An interval branch and bound global optimization algorithm for parameter estimation of three photovoltaic models." *Energy Conversion and Management* ٢٠٥ (٢٠٢٠): ١١٢٤٠٠.
- ١٧٨) El Sehiemy, Ragab A., F. Selim, Bachir Bentouati, and M. A. Abido. "A novel multi-objective hybrid particle swarm and salp optimization algorithm for technical-economical-environmental operation in power systems." *Energy* ١٩٣ (٢٠٢٠): ١١٦٨١٧.
- ١٧٩) Sakr, Walaa S., Hossam A. Abd el-Ghany, Ragab A. EL-Sehiemy, and Ahmed M. Azmy. "Techno-economic assessment of consumers' participation in the demand response program for optimal day-ahead scheduling of virtual power plants." *Alexandria Engineering Journal* ٥٩, no. ١ (٢٠٢٠): ٣٩٩-٤١٥.
- ١٨٠) Abdelwanis, Mohamed I., Amlak Abaza, Ragab A. El-Sehiemy, Mohamed N. Ibrahim, and Hegazy Rezk. "Parameter estimation of electric power transformers using coyote optimization algorithm with experimental verification." *IEEE Access* ٨ (٢٠٢٠): ٥٠٠٣٦-٥٠٠٤٤.
- ١٨١) Almabsout, Emad Ali, Ragab A. El-Sehiemy, Osman Nuri Uç An, and Oguz Bayat. "A hybrid local search-genetic algorithm for simultaneous placement of DG units and shunt capacitors in radial distribution systems." *IEEE Access* ٨ (٢٠٢٠): ٥٤٤٦٥-٥٤٤٨١.
- ١٨٢) El-Sehiemy, Ragab A., M. A. Hamida, and T. Mesbahi. "Parameter identification and state-of-charge estimation for lithium-polymer battery cells using enhanced sunflower optimization algorithm." *International Journal of Hydrogen Energy* ٤٥, no. ١٥ (٢٠٢٠): ٨٨٣٣-٨٨٤٢.
- ١٨٣) El-Ela, Adel A. Abo, Ragab A. El-Sehiemy, Abdullah M. Shaheen, and N. Kotb. "Optimal allocation of DGs with network reconfiguration using improved spotted hyena algorithm." *WSEAS Trans. Power Syst.* ١٥ (٢٠٢٠): ٦٠-٦٧.
- ١٨٤) Dolatabadi, Soheil, Ragab A. El-Sehiemy, and Saeid GhassemZadeh. "Scheduling of combined heat and generation outputs in power systems using a new hybrid multi-objective optimization algorithm." *Neural Computing and Applications* ٣٢, no. ١٤ (٢٠٢٠): ١٠٧٤١-١٠٧٥٧.
- ١٨٥) Kaddah, Sahar Sidky, Ragab A. El Sehiemy, and Alaa Zaky. "Solving Unit Commitment Problem in Deregulated Power Systems Environment." *MEJ. Mansoura Engineering Journal* ٣٨, no. ٤ (٢٠٢٠): ١-١٤.
- ١٨٦) Abaza, Amlak, Ragab A. El Sehiemy, and Ahmed Saeed Abdelrazek Bayoumi. "Optimal parameter estimation of solid oxide fuel cell model using coyote optimization algorithm." In *Recent advances in engineering mathematics and physics*, pp. ١٣٥-١٤٩. Springer, Cham, ٢٠٢٠.
- ١٨٧) Abou El- Ela, Adel A., Ragab A. El- Sehiemy, Abdullah M. Shaheen, and Ibrahim A. Eissa. "Optimal coordination of static VAR compensators, fixed capacitors, and distributed energy resources in Egyptian distribution networks." *International Transactions on Electrical Energy Systems* ٣٠, no. ١١ (٢٠٢٠): e١٢٦٠٩.

- ١٨٨) Abou El Ela, Adel A., Ragab El-Sehiemy, Abdullah M. Shaheen, and Abd El Galil Diab. "Optimal design of PID controller based sampe-jaya algorithm for load frequency control of linear and nonlinear multi-area thermal power systems." In International Journal of Engineering Research in Africa, vol. ٥٠, pp. ٧٩-٩٣. Trans Tech Publications Ltd, ٢٠٢٠.
- ١٨٩) Attia, Abdel-Fattah, Mohamed Abd Elaziz, Aboul Ella Hassanien, and Ragab A. El-Sehiemy. "Prediction of solar activity using hybrid artificial bee colony with neighborhood rough sets." IEEE Transactions on Computational Social Systems ٧, no. ٥ (٢٠٢٠): ١١٢٣-١١٣٠.
- ١٩٠) Elattar, Ehab E., Abdullah M. Shaheen, Abdallah M. Elsayed, and Ragab A. El-Sehiemy. "Optimal power flow with emerged technologies of voltage source converter stations in meshed power systems." IEEE Access ٨ (٢٠٢٠): ١٦٦٩٦٣-١٦٦٩٧٩.
- ١٩١) Shaheen, Abdullah M., and Ragab A. El-Sehiemy. "Enhanced feeder reconfiguration in primary distribution networks using backtracking search technique." Australian Journal of Electrical and Electronics Engineering ١٧, no. ٣ (٢٠٢٠): ١٩٦-٢٠٢.
- ١٩٢) Zaky, Alaa A., Mohamed N. Ibrahim, Hegazy Rezk, Eleftherios Christopoulos, Ragab A. El Sehiemy, Evangelos Hristoforou, Antonios Kladas, Peter Sergeant, and Polycarpos Falaras. "Energy efficiency improvement of water pumping system using synchronous reluctance motor fed by perovskite solar cells." International Journal of Energy Research ٤٤, no. ١٤ (٢٠٢٠): ١١٦٢٩-١١٦٤٢.
- ١٩٣) Elshebiny, Ahmed, A. Abou, and Ragab A. El-Sehiemy. "Network Reconfiguration to Improve Oman Distribution Network Parameters Using SCADA System and Fuzzy Clustering Technique." Authorea Preprints (٢٠٢٠).
- ١٩٤) Shaheen, Abdullah M., Ahmed Rabie Ginidi, Ragab A. El-Sehiemy, and Sherif SM Ghoneim. "Economic power and heat dispatch in cogeneration energy systems using manta ray foraging optimizer." IEEE Access ٨ (٢٠٢٠): ٢٠٨٢٨١-٢٠٨٢٩٥.
- ١٩٥) Lasmari, A., M. Zellagui, A. A. Gupta, R. A. El-Sehiemy, and R. Chenni. "Multi-objective salp swarm algorithm for performance enhancement of electrical distribution system including DG and DSTATCOM simultaneously." In the ٤th International Conference on Artificial Intelligence in Renewable Energetic Systems (IC-AIRES). Tipasa, Algeria, pp. ٢٢-٢٤. ٢٠٢٠.
- ١٩٦) Abdul-hamied, Dalia T., Abdullah M. Shaheen, Waleed A. Salem, Walaa I. Gabr, and Ragab A. El-sehiemy. "Equilibrium optimizer based multi dimensions operation of hybrid AC/DC grids." Alexandria Engineering Journal ٥٩, no. ٦ (٢٠٢٠): ٤٧٨٧-٤٨٠٣.
- ١٩٧) Shaheen, Abdullah Mohammed, Abdallah M. Elsayed, Ragab A. El-Sehiemy, and Almoataz Y. Abdelaziz. "Equilibrium optimization algorithm for network reconfiguration and distributed generation allocation in power systems." Applied Soft Computing ٩٨ (٢٠٢١): ١٠٦٨٦٧.
- ١٩٨) Shaheen, Abdullah M., Ahmed Rabie Ginidi, Ragab A. El-Sehiemy, and Sherif SM Ghoneim. "A forensic-based investigation algorithm for parameter extraction of solar cell models." IEEE Access ٩ (٢٠٢٠): ١-٢٠.
- ١٩٩) Shaheen, Abdullah M., Ehab E. Elattar, Ragab A. El-Sehiemy, and Abdallah M. Elsayed. "An improved sunflower optimization algorithm-based Monte Carlo simulation for efficiency improvement of radial distribution systems considering wind power uncertainty." IEEE Access ٩ (٢٠٢٠): ٢٣٣٦-٢٣٤٤.
- ٢٠٠) Abbas, Ahmed S., Ragab A. El-Sehiemy, Adel Abou El-Ela, Eman Salah Ali, Karar Mahmoud, Matti Lehtonen, and Mohamed MF Darwish. "Optimal harmonic mitigation in distribution systems with inverter based distributed generation." Applied Sciences ١١, no. ٢ (٢٠٢١): ٧٧٤.
- ٢٠١) El Ela, Adel A. Abou, Ragab El-Sehiemy, Abdullah M. Shaheen, and Ayman S. Shalaby. "A Priority List-Based Binary Crow Search Algorithm for Unit Commitment Problem." In International Journal of Engineering Research in Africa, vol. ٥٧, pp. ٢١١-٢٢٤. Trans Tech Publications Ltd, ٢٠٢١.
- ٢٠٢) Shaheen, Abdullah M., Ragab A. El- Sehiemy, Abdallah M. Elsayed, and Ehab E. Elattar. "Multi- objective manta ray foraging algorithm for efficient operation of hybrid AC/DC power grids

- with emission minimisation." IET Generation, Transmission & Distribution ١٥, no. ٨ (٢٠٢١): ١٣١٤-١٣٣٦.
- ٢٠٣) Valabhoju, Ashok, Anamika Yadav, Mohammad Pazoki, and Ragab A. El-Sehiemy. "Optimized ensemble of regression tree-based location of evolving faults in dual-circuit line." Neural Computing and Applications ٣٣, no. ١٤ (٢٠٢١): ٨٧٩٥-٨٨٢٠.
- ٢٠٤) Bayoumi, Ahmed S., Ragab A. El-Sehiemy, Karar Mahmoud, Matti Lehtonen, and Mohamed MF Darwish. "Assessment of an improved three-diode against modified two-diode patterns of MCS solar cells associated with soft parameter estimation paradigms." Applied Sciences ١١, no. ٣ (٢٠٢١): ١٠٥٥.
- ٢٠٥) Elattar, Ehab E., Abdullah M. Shaheen, Abdullah M. El-Sayed, Ragab A. El-Sehiemy, and Ahmed R. Ginidi. "Optimal operation of automated distribution networks based-MRFO algorithm." IEEE Access ٩ (٢٠٢١): ١٩٥٨٦-١٩٦٠١.
- ٢٠٦) Abaza, Amlak, Ragab A. El-Sehiemy, Karar Mahmoud, Matti Lehtonen, and Mohamed MF Darwish. "Optimal estimation of proton exchange membrane fuel cells parameter based on coyote optimization algorithm." Applied Sciences ١١, no. ٥ (٢٠٢١): ٢٠٥٢.
- ٢٠٧) Shaheen, Abdullah M., and Ragab A. El-Sehiemy. "A multiobjective salp optimization algorithm for techno-economic-based performance enhancement of distribution networks." IEEE Systems Journal ١٥, no. ١ (٢٠٢٠): ١٤٥٨-١٤٦٦.
- ٢٠٨) Shaheen, Abdullah M., and Ragab A. El-Sehiemy. "Optimal coordinated allocation of distributed generation units/capacitor banks/voltage regulators by EGWA." IEEE Systems Journal ١٥, no. ١ (٢٠٢٠): ٢٥٧-٢٦٤.
- ٢٠٩) Shaheen, Abdullah M., Ragab A. El-Sehiemy, Ehab E. Elattar, and Ahmed S. Abd-Elrazek. "A modified crow search optimizer for solving non-linear OPF problem with emissions." IEEE Access ٩ (٢٠٢١): ٤٣١٠٧-٤٣١٢٠.
- ٢١٠) An Effective Bi-Stage Method for Renewable Energy Sources Integration into Unbalanced Distribution Systems Considering Uncertainty
- ٢١١) Attia, Abdel-Fattah, Adel Sharaf, and Ragab El Sehiemy. "Multi-stage fuzzy based flexible controller for effective voltage stabilization in power systems." ISA transactions (٢٠٢١).
- ٢١٢) Elsayed, Abdallah M., Abdullah M. Shaheen, Mosleh M. Alharthi, Sherif SM Ghoneim, and Ragab A. El-Sehiemy. "Adequate operation of hybrid AC/MT-HVDC power systems using an improved multi-objective marine predators optimizer." IEEE Access ٩ (٢٠٢١): ٥١٠٦٥-٥١٠٨٧.
- ٢١٣) Shaheen, Abdullah M., Ragab A. El-Sehiemy, Abdallah M. Elsayed, and Ehab E. Elattar. "Multi-objective manta ray foraging algorithm for efficient operation of hybrid AC/DC power grids with emission minimisation." IET Generation, Transmission & Distribution ١٥, no. ٨ (٢٠٢١): ١٣١٤-١٣٣٦.
- ٢١٤) Said, Mokhtar, Abdullah M. Shaheen, Ahmed R. Ginidi, Ragab A. El-Sehiemy, Karar Mahmoud, Matti Lehtonen, and Mohamed MF Darwish. "Estimating parameters of photovoltaic models using accurate turbulent flow of water optimizer." Processes ٩, no. ٤ (٢٠٢١): ٦٢٧.
- ٢١٥) Shaheen, Abdullah M., Ragab A. El-Sehiemy, Salah Kamel, Ehab E. Elattar, and Abdallah M. Elsayed. "Improving distribution networks' consistency by optimal distribution system reconfiguration and distributed generations." IEEE Access ٩ (٢٠٢١): ٦٧١٨٦-٦٧٢٠٠.
- ٢١٦) Shaheen, Abdullah M., Abdallah M. Elsayed, and Ragab A. El-Sehiemy. "Optimal economic-environmental operation for AC-MTDC grids by improved crow search algorithm." IEEE Systems Journal ١٦, no. ١ (٢٠٢١): ١٢٧٠-١٢٧٧.
- ٢١٧) El-Ela, Adel A. Abo, Ragab A. El-Sehiemy, Abdullah M. Shaheen, and Aya R. Ellien. "Optimal allocation of distributed generation units correlated with fault current limiter sites in distribution systems." IEEE Systems Journal ١٥, no. ٢ (٢٠٢٠): ٢١٤٨-٢١٥٥.

- ٢١٨) Abaza, Amlak, Asmaa Fawzy, Ragab A. El-Sehiemy, Ali S. Alghamdi, and Salah Kamel. "Sensitive reactive power dispatch solution accomplished with renewable energy allocation using an enhanced coyote optimization algorithm." *Ain Shams Engineering Journal* ١٢, no. ٢ (٢٠٢١): ١٧٢٣-١٧٣٩.
- ٢١٩) Al Harthi, Mosleh, Sherif Ghoneim, Abdallah Elsayed, Ragab El-Sehiemy, Abdullah Shaheen, and Ahmed Ginidi. "A Multi-Objective Marine Predator Optimizer for Optimal Techno-Economic Operation of AC/DC Grids." *Stud. Inform. Control* ٣٠ (٢٠٢١): ٨٩-٩٩.
- ٢٢٠) Ginidi, Ahmed R., Abdallah M. Elsayed, Abdullah M. Shaheen, Ehab E. Elattar, and Ragab A. El-Sehiemy. "A novel heap-based optimizer for scheduling of large-scale combined heat and power economic dispatch." *IEEE Access* ٩ (٢٠٢١): ٨٣٦٩٥-٨٣٧٠٨.
- ٢٢١) Shaheen, Abdullah M., Ahmed R. Ginidi, Ragab A. El-Sehiemy, and Ehab E. Elattar. "Optimal economic power and heat dispatch in Cogeneration Systems including wind power." *Energy* ٢٢٥ (٢٠٢١): ١٢٠٢٦٣.
- ٢٢٢) El-Ela, Abou, A. Adel, Ragab A. El-Sehiemy, Abdullah M. Shaheen, and Abd El-Gelil Diab. "Enhanced coyote optimizer-based cascaded load frequency controllers in multi-area power systems with renewable." *Neural Computing and Applications* ٣٣, no. ١٤ (٢٠٢١): ٨٤٥٩-٨٤٧٧.
- ٢٢٣) Djekidel, Rabah, Bachir Bentouati, M. S. Javaid, H. R. E. H. Bouchekara, Ahmed Saeed Bayoumi, and Ragab A. El-Sehiemy. "Mitigating the effects of magnetic coupling between HV transmission line and metallic pipeline using slime mould algorithm." *Journal of Magnetism and Magnetic Materials* ٥٢٩ (٢٠٢١): ١٦٧٨٦٥.
- ٢٢٤) Shaheen, ABDULLAH M., Ragab A. El-Sehiemy, Mohammed Kharrich, Salah Kamel, EMRE ALP MİRAN, MEHMET ÇIYDEM, MASUM SHAH JUNAYED et al. "Transmission Network Planning for Realistic Egyptian Systems via Encircling Prey based Algorithms." *Turk. J. Electr. Eng. Comput. Sci* (٢٠٢١).
- ٢٢٥) Shaheen, Abdullah M., Abdullah M. Elsayed, Ahmed R. Ginidi, Ehab E. Elattar, and Ragab A. El-Sehiemy. "Effective automation of distribution systems with joint integration of DGs/SVCs considering reconfiguration capability by jellyfish search algorithm." *IEEE Access* ٩ (٢٠٢١): ٩٢٠٥٣-٩٢٠٦٩.
- ٢٢٦) Abou El- Ela, Adel A., Ragab A. El- Sehiemy, Abdullah M. Shaheen, and Aya R. Ellien. "Multiobjective coyote optimization algorithm for techno- economic simultaneous placement of DGs and FCLs in distribution networks." *International Transactions on Electrical Energy Systems* ٣١, no. ١١ (٢٠٢١): e١٣٠٥٠.
- ٢٢٧) Bayoumi, Ahmed Saeed Abdelrazek, Ragab A. El-Sehiemy, and Amlak Abaza. "Effective PV parameter estimation algorithm based on marine predators optimizer considering normal and low radiation operating conditions." *Arabian Journal for Science and Engineering* ٤٧, no. ٣ (٢٠٢٢): ٣٠٨٩-٣١٠٤.
- ٢٢٨) Ginidi, Ahmed, Sherif M. Ghoneim, Abdallah Elsayed, Ragab El-Sehiemy, Abdullah Shaheen, and Attia El-Fergany. "Gorilla troops optimizer for electrically based single and double-diode models of solar photovoltaic systems." *Sustainability* ١٣, no. ١٦ (٢٠٢١): ٩٤٥٩.
- ٢٢٩) Ginidi, Ahmed, Abdallah Elsayed, Abdullah Shaheen, Ehab Elattar, and Ragab El-Sehiemy. "An innovative hybrid heap-based and jellyfish search algorithm for combined heat and power economic dispatch in electrical grids." *Mathematics* ٩, no. ١٧ (٢٠٢١): ٢٠٥٣.
- ٢٣٠) Zellagui, Mohamed, Adel Lasmari, Samir Settoul, Ragab A. El- Sehiemy, Claude Ziad El-Bayeh, and Rachid Chenni. "Simultaneous allocation of photovoltaic DG and DSTATCOM for techno-economic and environmental benefits in electrical distribution systems at different loading conditions using novel hybrid optimization algorithms." *International Transactions on Electrical Energy Systems* ٣١, no. ٨ (٢٠٢١): e١٢٩٩٢.

- ٢٣١) Abdelwanis, Mohamed I., Ragab A. Sehiemy, and Mohamed A. Hamida. "Hybrid optimization algorithm for parameter estimation of poly-phase induction motors with experimental verification." *Energy and AI* ٥ (٢٠٢١): ١٠٠٠٨٣.
- ٢٣٢) Zaki, Mohamed I., Ragab A. El-Sehiemy, and Ghada M. Amer. "Efficient fault identification scheme of compensated transmission grid based on correlated reactive power measurements and discrete wavelet transform." *Journal of Electrical Engineering* ٧٢, no. ٤ (٢٠٢١): ٢١٧-٢٢٨.
- ٢٣٣) Lin, Lihua, Habib Ullah Khan, Abdallah Abdallah, Fazirulhisyam Hashim, Khaled Rabie, Imran Khan, Mohamad Khairi Ishak et al. "Hierarchical optimization and grid scheduling model for energy internet: a GA-based layered approach." *Energy Reports* (٢٠٢١).
- ٢٣٤) Shaheen, Abdullah M., Abdullah M. Elsayed, Ragab A. El-Sehiemy, Ahamed R. Ginidi, and Ehab Elattar. "Optimal management of static volt- ampere- reactive devices and distributed generations with reconfiguration capability in active distribution networks." *International Transactions on Electrical Energy Systems* ٣١, no. ١١ (٢٠٢١): e١٣١٢٦.
- ٢٣٥) Bentouati, Bachir, Aboubakr Khelifi, Abdullah M. Shaheen, and Ragab A. El-Sehiemy. "An enhanced moth-swarm algorithm for efficient energy management based multi dimensions OPF problem." *Journal of Ambient Intelligence and Humanized Computing* ١٢, no. ١٠ (٢٠٢١): ٩٤٩٩-٩٥١٩.
- ٢٣٦) Abou El Ela, Adel A., Ragab El-Sehiemy, Abdullah M. Shaheen, and Ayman S. Shalaby. "Economic and Reliable Preventive Maintenance Scheduling in Power Systems by Using Binary Crow Search Algorithm." In *International Journal of Engineering Research in Africa*, vol. ٥٦, pp. ١٨٢-١٩٨. Trans Tech Publications Ltd, ٢٠٢١.
- ٢٣٧) Abou El-Ela, Adel A., Ragab A. El-Seheimy, Abdullah M. Shaheen, Walaa A. Wahbi, and Mohamed T. Mouwafi. "PV and battery energy storage integration in distribution networks using equilibrium algorithm." *Journal of Energy Storage* ٤٢ (٢٠٢١): ١٠٣٠٤١.
- ٢٣٨) El- Dabah, Mahmoud A., Ragab A. El-Sehiemy, M. Becherif, and M. A. Ebrahim. "Parameter estimation of triple diode photovoltaic model using an artificial ecosystem- based optimizer." *International Transactions on Electrical Energy Systems* ٣١, no. ١١ (٢٠٢١): e١٣٠٤٣.
- ٢٣٩) Ginidi, Ahmed R., Abdullah M. Shaheen, Ragab A. El-Sehiemy, and Ehab Elattar. "Supply demand optimization algorithm for parameter extraction of various solar cell models." *Energy Reports* ٧ (٢٠٢١): ٥٧٧٢-٥٧٩٤.
- ٢٤٠) Shaheen, Abdullah M., Mohamed A. Hamida, Ragab A. El-Sehiemy, and Ehab E. Elattar. "Optimal parameter identification of linear and non-linear models for Li-Ion Battery Cells." *Energy Reports* ٧ (٢٠٢١): ٧١٧٠-٧١٨٥.
- ٢٤١) El-Sehiemy, Ragab, Abdallah Elsayed, Abdullah Shaheen, Ehab Elattar, and Ahmed Ginidi. "Scheduling of generation stations, OLTC substation transformers and VAR sources for sustainable power system operation using SNS optimizer." *Sustainability* ١٣, no. ٢١ (٢٠٢١): ١١٩٤٧.
- ٢٤٢) Yadav, Anamika, Ayush Kumar, Rudra Pratap Singh Rana, Maya Chandrakar, Mohammad Pazoki, and Ragab A. El Sehiemy. "An Efficient Monthly Load Forecasting Model Using Gaussian Process Regression." In ٢٠٢١ IEEE ٤th International Conference on Computing, Power and Communication Technologies (GUCON), pp. ١-٨. IEEE, ٢٠٢١.
- ٢٤٣) El Ela, Adel A. Abou, Ragab El-Sehiemy, Abdullah M. Shaheen, and Ayman S. Shalaby. "A Priority List-Based Binary Crow Search Algorithm for Unit Commitment Problem." In *International Journal of Engineering Research in Africa*, vol. ٥٧, pp. ٢١١-٢٢٤. Trans Tech Publications Ltd, ٢٠٢١.
- ٢٤٤) Shaheen, Abdullah, Abdallah Elsayed, Ahmed Ginidi, Ragab El-Sehiemy, and Ehab Elattar. "Reconfiguration of electrical distribution network-based DG and capacitors allocations using artificial ecosystem optimizer: Practical case study." *Alexandria Engineering Journal* ٦١, no. ٨ (٢٠٢٢): ٦١٠٥-٦١١٨.

- ٢٤٥) El-Sehiemy, Ragab A., and Almoataz Y. Abdelaziz. "Ant Colony Optimization Algorithm for Electrical Power Systems Applications: A Literature Review." Applications of Nature-Inspired Computing in Renewable Energy Systems (٢٠٢٢): ٣٧-٥٩.
- ٢٤٦) Abou El-Ela, Adel A., Ragab A. El-Sehiemy, Ahmed S. Abbas, and Khalid K. Fetyan. "Hosting Capacity Assessment of Renewable Energy Resources in Distribution Systems." In ٢٠٢١ ٢٢nd International Middle East Power Systems Conference (MEPCON), pp. ٢٩٤-٢٩٩. IEEE, ٢٠٢١.
- ٢٤٧) Zaky, Alaa A., Yasser Rashwan, Mostafa Elhossieni, and Ragab A. El-Sehiemy. "Photovoltaic Models Parameters Estimation Based on Elephant Herding Optimization Algorithm." In ٢٠٢١ ٢٢nd International Middle East Power Systems Conference (MEPCON), pp. ١-٦. IEEE, ٢٠٢١.
- ٢٤٨) Dahman, Amira M., Ragab A. El Sehiemy, Mohamed I. Zaki, and Adel A. Abou El-Ela. "Ground/Phase Detection of Power Transformers' Faults with Matrix-Based Fault Representation." In ٢٠٢١ ٢٢nd International Middle East Power Systems Conference (MEPCON), pp. ١٤٤-١٤٩. IEEE, ٢٠٢١.
- ٢٤٩) Shaheen, Abdullah M., Ragab A. El-Sehiemy, Mosleh M. Alharthi, Sherif SM Ghoneim, and Ahmed R. Ginidi. "Multi-objective jellyfish search optimizer for efficient power system operation based on multi-dimensional OPF framework." Energy ٢٣٧ (٢٠٢١): ١٢١٤٧٨.
- ٢٥٠) Malki, Amer, Abdallah A. Mohamed, Yasser I. Rashwan, Ragab A. El-Sehiemy, and Mostafa A. Elhosseini. "Parameter Identification of Photovoltaic Cell Model Using Modified Elephant Herding Optimization-Based Algorithms." Applied Sciences ١١, no. ٢٤ (٢٠٢١): ١١٩٢٩.
- ٢٥١) Ali, Eman S., Ragab A. El- Sehiemy, and Adel A. Abou El- Ela. "Optimal partitioning of unbalanced active distribution systems for supply- sufficient micro- grids considering uncertainty." International Transactions on Electrical Energy Systems ٣١, no. ١٢ (٢٠٢١): e١٣٢١٠.

١٣- معامل تخدم مقررات الهندسة

اسم المعمل	محتويات المعمل والغرض منها
معامل الحاسب الآلي	٤ معامل تحتوى على جهاز حاسب آلى ٣٦ لتدريب الطلبة على برامج الحاسب الآلي .
معامل الشبكات	وهو تابع لمعمل الحاسب الآلي (١) ويستخدم في الدراسات العليا والدبلومه .
معامل الاتصالات	يحتوى هذا المعمل على العديد من الأجهزة الخاصة بقسم اتصالات ومنها : <ol style="list-style-type: none"> ١. Complex antenna. ٢. Transmission lines ٣. Digital modulation procedures ٤. Analogue modulation procedures ٥. Modem procedures ٦. Quadripoes and filters ٧. Am trasmitter ٨. Am receiver.

<p>وهذا المعمل يحتوى على العديد من الأجهزة التي توضح للطالب كيفية التعامل الأدوات الالكترونية البسيطة في بداية المقرر الدراسي للقسم وهذا المعمل بداخله معملان المعمل الأول خاص بللا سس الكهربائية والأخر يسمى معمل القياسات تقوم الأجهزة في معمل الأسس بالتجارب الآتية بالتجارب الآتية :-</p> <ol style="list-style-type: none"> ١. Basic control systems equipment and terms used . ٢. Positional Resolution Transducers. ٣. Wheatstone Bridge Measurements . ٤. Temperature Sensors. ٥. Light Measurements. ٦. Linear Position or Forces Application. ٧. Environmental Measurements . ٨. Rotational Speed or Position Measurements . ٩. Sound Measurements . <p>أما التجارب الخاصة بمعمل القياسات فهي كالآتي :-</p> <ol style="list-style-type: none"> ١. DC circuits Training Kit ٢. AC circuits Training Kit . ٣. Three Phase Training Kit . ٤. Electromagnetic Training Kit . ٥. Conducting measuring Training Kit . ٦. Electric network analysis Training Kit . ٧. Semiconductor Training Kit . ٨. Transistor multi vibrator Training Kit ٩. Power Semiconductor devices Training Kit . ١٠. Transistor and amplifier. 	<p>معمل الأسس الكهربائية والالكترونية</p>
<p>ويحتوى هذا المعمل على العديد من الأجهزة الكهربائية الثقيلة مثل المولدات والمحولات ومواتير وبعض الأجهزة المساعدة لإجراء التجارب الخاصة بهذا القسم وهى :-</p> <ol style="list-style-type: none"> ١. Determination of equivalent circuits parameters of ٣-phase alternator ٢. Determination of equivalent circuits parameters of ٣-phase induction motor . ٣. Speed control of ٣-phase induction motor ٤. Self excited induction motor . ٥. Determination of parameters of short –medium and long transmission line ٦. Determination of equivalent circuit parameters of ٣-phase 	<p>معمل القوى الكهربائية</p>

<p>synchronous machine .</p> <p>٧. helping students in graduation project .</p>	
<p>يحتوى المعمل على العديد من الاجهزه الكهربيه والالكترونيه والتي تدخل في أبحاث الماجستير والدكتوراه وهو يعمل ب power electronic والتجارب الخاصة بهذا المعمل هي :</p> <ol style="list-style-type: none"> ١. Graduation project. ٢. Three phase induction motor. ٣. Control five phase induction motor. ٤. Variable speed frequency. ٥. All inverters experiments. 	<p>معمل الأبحاث الكهربية والالكترونية</p>
<p>يحتوى المعمل على عدد من أجهزه مصادر الجهد وأجهزه قياس للتيار والجهد والقدرة الكهربيه ومحولات (٣-phase & ١-phase) وعدد من المواتير ٣-phase & ١-phase) وعدد من أجهزه Unitarian و التجارب الخاصة بالمعمل :-</p> <ol style="list-style-type: none"> ١. Starting. ٢. Speed control. ٣. connection. ٤. Loading. ٥. Synchronization. ٦. Control by PLC . 	<p>- معمل التحكم في الآلات الكهربيه</p>

١٤- مشاريع التخرج للعام الجامعي ٢٠٢٢-٢٠٢٣

مقرر المشروع للفرقة الرابعة بقسم الهندسة الكهربيه للعام الجامعي ٢٠٢١-٢٠٢٢ (شعبة هندسة القوي والآلات الكهربيه)

ملخص فكرة المشروع باللغة الإنجليزية	التخصص الفرعي للمشروع	أسماء فريق المشروع من الطلاب	اسم المشرف علي المشروع	عنوان المشروع باللغة الإنجليزية والعربية	رقم المجموعة
		١- ابراهيم وجدي ابراهيم محمد ٢- احمد محمد علي مصطفى ابو بريكه ٤- السيد حسن علي ابوشعيشع ٥- شهاب محمد محمود شهاب ٧- محمد شريف عطيه عبدالهادي ٩- يونس خليفه ابراهيم خليفه ١٠- مصطفى كمال عبدالرحمن البرعي			١

<p>The project deals with the smart operation of microgrids. It handles the energy management using smart meters and IoT technology. The impact of renewable energy is also studied in the smart that fashion.</p>	<p>Smart Electrical Microgrid</p>	<p>١- حسن التميمي التميمي عبد الله ٢- ابراهيم واصل نيازي عثمان ٣- أحمد حسن حافظ سيف الدين ٤- أحمد فكري عبد الواحد عبادة ٥- أحمد محمد محمد شميمس ٦- عبدالرحمن عمر السيد عبد اللطيف ٧- عمر سعد أبو حجازي ٨- محمد باز حسني خميس ٩- ندا ابراهيم السيد ابو اليزيد ١٠- ياسر أحمد محمد أنيس</p>	<p>أ.م.د/ هاني أحمد عبد السلام</p>	<p>Smart Electrical Microgrid الشبكات الكهربائية المصغرة الذكية</p>	<p>٢</p>
<p>Throughout the study of High Voltage Transmission lines, we found out about corona effect which is caused by the ionization of a fluid such as air surrounding the conductor carrying high voltage. Ozone gas can be used in sterilization and killing viruses, that's why we will use the ozone gas in killing the corona virus (COVID-19). We will generate the ozone gas with the use of a high voltage ignition coil and pass air through the field produced by the ignition coil to ionize the air and produce O₃. It can be kept in special bottles to keep the ozone gas as long as possible, and we can use a PLC system to control the amount of ozone generated by using ozone sensor and oxygen sensor and connect them to control the system automatically. we can keep the ozone generated in special bottles to save it until needed</p>	<p>PLC High voltage</p>	<p>١- كريم محمد فكري عبد الخالق ٢- عبدالله مصطفى علي الشافعي ٣- محمد السيد ابراهيم مرعي ٤- بسمه مصطفى ابراهيم مصطفى ٥- اميره علي عوض رزقه ٦- اسراء محمد علي عيسى ٧- اسراء محمد السيد شلبي ٨- الاء احمد سعيد القليل ٩- هدير لطفى محمد اليوسمي ١٠- ساره علي احمد احمد</p>	<p>أ.م.د/ ايمان سعد عبد النبي</p>	<p>القضاء علي فيروس كورونا باستخدام غاز الأوزون الناتج عن ظاهرة الكورونا الكهربائية Killing corona virus using corona discharge</p>	<p>٣</p>
<p>This project presents a speed control of three phase induction motors by utilizing Arduino. The Arduino controller is used to generate PWM (pulse width modulation) signals and monitoring all sensing values sent and receiving from the MATLAB software loaded on the computer. Voltage/frequency (V/F) control is the most adaptable of the techniques for controlling induction motors. One of the in the middle essentials concerning this plan happen that the (PWM) inverter. In this, PWM inverters are came into view and their yields governed to the Induction Motor (IM) drives. This voltage also lowered the circuit's harmonics and switching losses. The closed loop method is used to control the speed of a three-phase induction motor by using feedback of current, speed and torque signals.</p>	<p>Electrical drive</p>	<p>١- ميلاد مجدي يوسف منصور ٢- جرجس موسى جرجس ٣- كيرلس وصفي فوزي ٤- محمد السيد كامل صالح ٥- ناصر موسى مسلم غالي ٦- طارق ناظر احمد يوسف ٧- عمرو رجب حمادة ٨- زياد سعيد محمد بلال ٩- احمد محمد احمد سالم ١٠- محمود عبد الحلیم قنحي</p>	<p>أ.م.د/ محمد ابراهيم عبد الوئيس</p>	<p>Speed Control and monitoring of Three Phase Induction Motor by V/F Method with Arduino and Matlab التحكم في سرعة المحرك الحثي ثلاثي الأطوار ومراقبته بطريقة V / F باستخدام Matlab و Arduino</p>	<p>٤</p>

<p>The project relies mainly on training students to design the electrical power distribution system for buildings, by designing: lighting - sockets - cables - fire system - sound system - communication and internet system - monitoring system based on the Egyptian code for electrical installation works and actually applying this to the one of the existing buildings.</p>		<p>١- عبدالعزيز ابراهيم عبدالفتاح ٢- محمد السيد الحسيني محمد ٣- محمد السيد محمد عبد المقصود ٤- عمرو محمد فهمي علي مشعل ٥- حنان محمد حسن جنيدي ٦- احمد محمود عبدالمجيد فايد ٧- حازم خالد محمد البلتاجي ٨- ابراهيم عبدالحميد الجنيبي ٩- اشرف صابر ابراهيم مصطفى رمضان ١٠- محمود صلاح عبدالعزيز عبدالله ١١- احمد طارق مصطفى مراد</p>	<p>ا.م.د/ فتح الله فريخ سليم</p>	<p>عمل تصميم كهربى متكامل لمبنى فندق الراجحي حسب الكود المصري للتركيبات الكهربائية Complete Electrical Design for Elrajhy Hotel According to Electrical Installation Egyptian Code</p>	<p>٥</p>
<p>Designing and implementing the electrical system of an electric car using renewable energy sources such as solar panels and storing this energy in several storage units such as lithium ion batteries and super capacitors, which allows the car to operate for a longer time and a greater distance in addition to the use of super capacitors allows more response speed during operation in addition to The use of an important feature which is the application of regenerative return brakes that allow the car to return part of the energy lost in friction to the battery and then convert the current of different storage units by using the two-way inverter to the current required for the car's engine to operate and also how to link between normal charging sources And the source of renewable energy and the car's energy storage units, in addition to controlling the engine speed via a microcontroller, thus controlling the car's speed.</p>		<p>١- مصطفى مدحت بهجت نور الدين ٢- خالد خير محمد حسن ٣- محمد محي الدين محي الدين ٤- محمود سعيد شبل ٥- محمود السعيد عبدالخالق ٦- احمد خالد الشيبيني ٧- سعد صبحي عبدالستار الغزالي ٨- السعيد المتولي زيدان ٩- اشرف شريف النجار ١٠- احمد طارق مصطفى مراد</p>	<p>د / املاك أباطة الحريري</p>	<p>Design and implementation of advanced electrical car. تصميم وتطبيق سيارة كهربائية متقدمة.</p>	<p>٦</p>
<p>Designing and implementing a model for the irrigation system of agricultural lands in rural areas, controlling and monitoring it using the Internet of Things technology, and supplying all the elements used with electrical energy through solar panels, all elements are controlled and data exchanged between them wirelessly .The irrigation system is monitored through the smart phone and a website, and the system is linked to the weather sites to benefit from rain water, and to extract the necessary water from the ground using</p>		<p>١- محمد هلال اسماعيل السيد ٢- محمد صبحي محمد ابراهيم ٣- محمد عيد محمد خليل ٤- محمد رمضان حسن الحسيني ٥- محمد حامد حسين جاب الله ٦- محمد حمدي فتحي الاترني ٧- ابراهيم السيد ابراهيم لين ٨- السيد عوض خميس براني ٩- السيد علي السيد الدخاخي ١٠- هبه جمال مرسي عبدالحليم</p>	<p>د / شريف محمود أمام</p>	<p>Control and monitoring of rural area irrigation system using IOT التحكم و مراقبة نظام ري المناطق الريفية باستخدام إنترنت الأشياء</p>	<p>٧</p>

water pumping systems, and a data logger is made for all the data in the system during the agricultural season, thus predicting the amount of water needed in the following seasons.					
Our way of living needs to change, at all levels. Home Automation is adding official support for home energy management. Energy management will help users monitor the energy usage, transition to sustainable energy, and save money. intelligent homes are needed to make smart cities. all of this starts with energy management in the home.	Automation systems	١- فكري فاروق فكري غاتم ٢- رمضان عبده عبدالعزيز منصور ٣- أحمد السعيد أحمد عامر ٤- محمد عيد محمد عاشور ٥- أحمد عبد الرحمن محمد عبدالرحمن ٦- إيهاب ياسر السيد اللواتي ٧- أحمد منصور زايد محمد ٨- عمرو مصطفى أحمد المسلماني ٩- محمد أحمد عبدالمقصود نجا ١٠- عمرو إبراهيم محمود خطاب	د/ محمد بدیع شفيق	Smart Home automation and customer-premise based optimized power management system via multiple platforms (especially using home assistant application) المنزل الذكي ونظام إدارة الطاقة المحسن المستند إلى العملاء عبر منصات متعددة (خاصة باستخدام تطبيق مساعد المنزل)	٨
this project concerns with photovoltaic(PV) systems both stand alone and grid connected. The design of the system PV system for feeding loads in remote areas or as alternative source for electricity. The project also deals with the grid connected PV in case of normal operation, during faults and the islanding issue. The theoretical studied cases will be implemented experimentally.	القوى الكهربائية - الطاقة الجديده والمجدده - الخلايا الشمسيه وتطبيقاتها في نظم القولى الكهربيه	١- علي السيد علي محمد اللبودي ٢- احمد مجدي سعد محمود الطويل ٣- خالد محمد عبد الوهاب القحافي ٤- رمضان متولي زكريا حارس البنا ٥- منار صبري محمد حموده ٦- ندى صبحي سعيد عطيان ٧- تقى محمود سعد شلبي ٨- غاده طلعت محمد نوفل ٩- مصطفى احمد محمد داود ١٠- مصطفى نصر السيد الزياد ١١- محمد احمد كمال شحاته	د/ علاء احمد زكي حسين	Photovoltaic system design and effect of its penteration on electric grid. تصميم النظام الكهروضوئي وتأثير اختراقه على الشبكة الكهربائية.	٩
controlling ٣ phase induction motor by using ٣ phase inverter and d space to move an electrical load using a generator and determining the values of current voltage and speed of the motor	control of induction machine	١- احمد السيد فهمي احمد ٢- عمر جمال سرور ٣- محمد هارون احمد ٤- مصطفى خالد الشهاوي ٥- محمود عبدالعزيز النمكي ٦- يحيى زكريا مندوبلى ٧- احمد على السيد ٨- حمزه طارق عبدالحميد ٩- شريف احمد عبداللطيف ١٠- محمد احمد الصباحي ١١- احمد ناصر عزت محمد دعيبس	د/ مسعد محي الدين علي	electric drive system of ٣ phase induction motor نظام الدفع الكهربائي للمحرك الحثي ثلاثي الطور	١٠

مقرر المشروع للفرقة الرابعة بقسم الهندسة الكهربائية للعام الجامعي ٢٠٢١-٢٠٢٢ (شعبة هندسة الالكترونيات والاتصالات الكهربائية)

رقم المجموعة	عنوان المشروع باللغة الإنجليزية والعربية	اسم المشرف علي المشروع	أسماء فريق المشروع من الطلاب	التخصص الفرعي للمشروع	ملخص فكرة المشروع باللغة الإنجليزية
١	Smart Mirror المراه الذكية	أ.م.د / ابراهيم فتحي العشري	١. احمد لطفي اسماعيل ٢. احمد محمد السعيد ابراهيم ٣. خالد سمير عبدالفتاح محمد ٤. محمد السيد ابومسلم ٥. محمود سعد يوسف مصطفى ٦. محمد وجدي ابراهيم شباره ٧. مروه علاء الدين علي غالي ٨. عبدالرحمن محمد رشدي ٩. اسماء حماده رمضان السحالي	IOT	Smart mirror also known as magic mirror it consists of a monitor and a tiny computer behind a two-way mirror it displays the time, weather, calendar, news and social media updates The magic is created by placing a transparent mirror over a

<p>screen such as a tablet, monitor, or TV. The big advantage of a smart mirror is the ability to display useful information without needing to open apps or do anything. You simply look at your smart mirror and the information is there. We will use face recognition and voice control. We also will use it as a mini computer.</p>					
<p>Intelligent Reflecting Surface (IRS) is one of the most important enhancement in 5G mobile networks that overcome the problems of MIMO mobile system. In our project, we discussed the main definition and main advantages of the IRS. The simulations illustrates how we overcome some challenges in IRS to improve the transmission.</p>	<p>Intelligent Reflecting Surfaces</p>	<p>١- شهاب عبدالوهاب ٢- محمود شحاته ٣- محمد مجدى ٤- شمس الدين محمد ٥- ورده شعبان ٦- يوسف حمدى أبو دنيا ٧- عبدالله إبراهيم بسيونى</p>	<p>د/ رنا عدلي راشد</p>	<p>Intelligent Reflecting Surfaces (IRS) الاسطح العاكسة الذكية</p>	<p>٢</p>
<p>Drowsiness detection is a safety technology that can prevent accidents that are caused by drivers who fall asleep while driving.</p> <p>The objective of this Python project is to build a drowsiness detection system that will detect that a person's eyes are closed for a few seconds and the system will alert the driver when drowsiness is detected.</p> <p>In this Python project, we will be using OpenCV for gathering the images from webcam in addition to some of the data augmentation to increase the number of images that will be in the training to be feed into a Deep Learning model which will classify whether the person's eyes are 'Open' or 'Closed'.</p> <p>The model will have two classifications or labels, the first one when the driver's eyes are open then the label will be 'awake,' and the system will not do any alert.</p> <p>The second classification or label will be defined when the driver's eyes are closed</p>	<p>معالجة الصور الرقمية</p>	<p>١- احمد هشام محمد السمديسي ٢- مصطفى رضا رزق ٣- محمد فؤاد أنور ٤- اندرو جورج روفائيل سيداروس ٥- زياد سعد محمد سعد</p>	<p>د/ عماد عبد الحليم الشاذلي</p>	<p>Driver Drowsiness Detection System</p>	<p>٣</p>

after an amount of time then the system will alert the driver with an alarm to warn the driver from any danger.					
The next fifth generation (5G) of wireless communication networks comes with a set of new features to satisfy the demand of data-intensive applications: millimeter-wave frequencies, massive antenna arrays, beamforming, and dense cells. In this project, we investigate the use of beamforming techniques through various architectures and evaluate the performance of 5G wireless access networks. This tool is proposed and applied to a covered area in Egypt to simulate 5G networks.	Cellular Networks	١. احمد عبد ربه ٢. محمد الانصاري ٣. وائل القاضي ٤. يوسف الدوي ٥. احمد عمار ٦. محمد عيسى ٧. مصطفى ناجح	د/ أميرة العطار	Performance Evaluation of 5G Wireless Network in a Covered Area تقييم أداء شبكة 5G اللاسلكية في منطقة مغطاة	٤
		١- ٢- ٣- ٤- ٥-			٥

مقرر المشروع للفرقة الرابعة بقسم الهندسة الكهربائية للعام الجامعي ٢٠٢١-٢٠٢٢ (شعبة هندسة الحاسبات والنظم)

ملخص فكرة المشروع باللغة الإنجليزية	التخصص الفرعي للمشروع	أسماء فريق المشروع من الطلاب	اسم المشرف علي المشروع	عنوان المشروع باللغة الإنجليزية والعربية	رقم المجموعة
يستعرض المشروع طرق البحث عن ادوية في صيدليات المنطقة عن طريق الانترنت ويوضح استخدامات الدواء والآثار الجانبية له ويتيح للصيدليات اضافة ادوية جديدة و يتيح للمريض البحث عن دواء لعلاج اعراض معينة	قواعد بيانات ادوية	١- محمود فتحي أحمد نصار ٢- ايمان عبد الجليل علي ٣- سناء محمد رزق ٤- أميرة عدلي ابراهيم ٥- عبد الله محمود ابو البزید ٦- مايكل امير كمال ٧- عادل شكري سعد ٨- رضا رشاد بسطويبي ٩- مصطفى محمد زين العابدين ١٠- عبد العزيز مصطفى الحداد	أ.م.د / علي عبد الغفار صقر	عمل نظام قواعد بيانات صيدلية ذكيه Intelligent on line pharmacy	١

		<ul style="list-style-type: none"> ١- اسلام محمد فارس ٢- محمد عبد الرحيم علي ٣- محمد فريد احمد ٤- عبد الرحمن عصام عبد الحليم ٥- محمود هشام تركي ٦- كريم ابراهيم فتوح ٧- احمد سامي أيوب ٨- عمرو محمد وهيب ٩- عبد الله محمود عبد القادر ١٠- محمد عبد الرحيم الامام 	أم.د/ تامر مدحت ابراهيم		٢
		<ul style="list-style-type: none"> ١- مهني محسن محمد البنا ٢- عبد الرحمن مجدي جادو ٣- هيثم شعبان العبد ٤- احمد ابراهيم عيسى ٥- احمد صلاح السعيد ٦- مصطفى عبد العزيز الدويك ٧- السيد حسن أبو شعيشع 	د/ غادة مصطفى هميسه		٣
<p>The Internet related data and communication advancements offer extraordinary open doors for business development. The internet and related advancements Organizations can utilize a global innovation program for e-commerce. Online-stores systems are developed as distributed applications. The architecture of an e-commerce system conceived as a distributed application. The Internet associated information and communication technologies offer unprecedented opportunities for business innovation. Companies can use the Internet and associated technologies extensively as a global and cost-effective program for e-commerce. This graduation project suggests that processes such as project design are personalized, and profiling, control, and security should be implemented in an e-commerce application. Also, search management, content management, payment systems, catalog management, workflow management, event notification, and collaboration and trading. Besides, our project has an application for machine learning which will be implemented in a recommender system. Many of the largest commerce websites are already using recommender systems to help their customers find products to purchase. A recommender system learns from a customer and recommends products that they</p>	Computer vision Artificial Intelligent	<ul style="list-style-type: none"> ١- عمر أحمد صبحي ٢- أحمد محمود عبد المنعم ٣- عمرو صابر فتحي ٤- مدحت جهاد عاشور ٥- مصطفى صبحي المنسي ٦- أحمد حسن الطنوبي ٧- منصور نشأت منصور ٨- ألاء سامي ٩- مروة عبدالفتاح ١٠- شيرين فريد 	د/ وسام محمد فكري	الرقمنة البشرية في التجارة الإلكترونية Human Digitalization in E- commerce	٤

will find most valuable from among the available products. And we have in our e-commerce another application for Artificial intelligence to create a model that mimics the client's profile so that he can see the clothes which he chose on him like he was in a real clothes shop, so he can simply choose the perfect match.					
يقوم المشروع بعرض امكانيات مستشفى و عرض الاشعة و التاريخ المرضي والاعراض من خلال ملفات صور وفيديوهات و يقوم بتشخيص الحالة بناء على ملف المريض وحجز سرير في القسم المناسب و تسكين طبيب معالج من خلال جداول الاطباء والمرضى و حجز في طابور العمليات ان لزم	نظام صحي شامل	١- عبد الرحمن محمد القصاص ٢- كريم محمد القاضي ٣- محمد عبد الله أبو شعيشع ٤- اباد سامح مرسى ٥- عمر مطر ٦- انجي طلال ٧- أميرة البرعي ٨- ايمان عبد الفتاح الاشطوخى ٩- اسلام محمد شكري السيار	أ.م.د / علي عبد الغفار صقر	عمل نظام استعلام حجز واستقبال وتشخيص بمستشفى On line hospitality for reservation, reception, and expert media diagnosing	٥
		١. محمد على محمد على شرابي ٢. اسامة محمد المكاوي	-		٦
The aim of this project is to design and implement a smart glasses used to detect, recognize, and utter most objects around, using computer vision techniques and artificial intelligence algorithms. Students have been able to implement the model on software and hardware. The involved hardware in this project are Raspberry Pi, camera, speaker, eyeglasses frame, and batteries. First, the model has been trained on well-known objects (persons, food, mobiles, cars, desks, ...) using many images for these objects, separately. After that, the model will be able to detect these objects in images captured with the camera in real time. The system will also utter the name of the recognized object using the connected speaker. This project will help the vision impaired people to sense the world around them, by telling them which objects are on front. Furthermore, this project can avoid many accidents for these people by warning them about the facing objects.	Artificial Intelligence Computer Vision	١. فتوح عاطف عبدالفتاح ٢. ابراهيم رجب ابراهيم ٣. محمود السيد بكير ٤. محمد محمد ابراهيم ٥. احمد عادل الأصولي ٦. محمد عبدالحافظ ٧. أسماء عبدالعزيز السبكي ٨. هدى خالد السعيد	د/علي صيام	A Smart Glasses for Vision Impaired People نظارة ذكية لفاقدى البصر	٧

١٥- إنجازات القسم خلال هذا العام ٢٠٢٢-٢٠٢٣ مقارنة بالعام الماضي

- يمكن إيجاز إنجازات القسم خلال العام ٢٠٢٢-٢٠٢٣ في النقاط التالية:
- تم اعداد لائحة الدراسات العليا الجديدة لتشمل فتح مرحلتين الماجستير والدكتوراة في كل من التخصصات التالية:
 ١. هندسة القوى والآلات الكهربائية.
 ٢. هندسة الإلكترونيات والاتصالات الكهربائية.
 ٣. هندسة الحاسبات والنظم.
 - تم اعتماد لائحة البكالوريوس الجديدة بالقسم للعمل بنظام الساعات المعتمدة

رئيس القسم

أ.م. د/ إيمان سعد عبد النبي.