

Egypt, Oman
+968 9238 301
+201022499084

e-mails: mloey@fci.bu.edu.eg
mohamed.ramadan@asu.edu.om
mohamedloey@gmail.com

website: <https://mloey.github.io>
[Google scholar](#)

MOHAMED LOEY RAMADAN IBRAHIM

Curriculum Vitae

Associate Professor

Computer Science Department
Faculty of Computers and Artificial Intelligence
Benha University, Egypt

Assistant Professor

Electrical Engineering and Computer Science
Program, College of Engineering
A'Sharqiyah University, Oman

RESEARCH OVERVIEW

My research focuses on the development of advanced Machine Learning, Deep Learning, and Artificial Intelligence models to solve complex real-world problems across multiple domains such as healthcare, cybersecurity, agriculture, education, and intelligent systems. I aim to design smart, reliable, and efficient solutions that support high-impact applications with accuracy, safety, and scalability.

My current and future research interests include:

- **Developing** hybrid machine learning and deep learning models for nonlinear and complex systems.
- **Designing** trustworthy and explainable AI systems with robustness and safety verification.
- **Applying** AI techniques in cybersecurity, digital forensics, threat detection, and privacy protection.
- **Building** intelligent healthcare systems for medical diagnosis using imaging, signal processing, and multimodal data.
- **Creating** real-time, lightweight, and open-source AI solutions for robotics, automation, and smart environments.
- **Exploring** Natural Language Processing, Generative AI, and multimodal learning for emerging applications.

I have been listed among the World's **Top 2% Scientists in 2022, 2023, 2024, and 2025**, according to the rankings released by **Stanford University** and **Scopus**, reflecting the global impact and recognition of my research contributions. I have also published extensively in high-impact international journals and conferences, with strong citation records, demonstrating the practical significance and scientific value of my research output.

ACADEMIC CERTIFICATES

PhD in Computer Science
Faculty of Computers and Artificial Intelligence
Benha University, Qalyubia, Egypt

Sept. 2011 – May 2017

- Thesis: A Pen Based Intelligent System for Educating Arabic Handwriting
- Developed and evaluated an intelligent tutor system to recognize and diagnose Arabic children handwritten characters and digits mistakes via deep learning architectures

Master in Information Technology **Sept. 2007 – Aug. 2010**

Faculty of Computers and Artificial Intelligence

Cairo University, Cairo, Egypt

- Thesis: Improving the Performance of Anti-GPS Signal
- Designed and simulated GPS jamming signal using new technology of jamming.

B.Sc. in Information Technology

Sept. 2002 – Jul. 2006

Faculty of Computers and Artificial Intelligence

Cairo University, Cairo, Egypt

- Very good with honors

ACADEMIC POSITIONS

Industry and Energy Technology College, New Cairo Technological University, Cairo, Egypt

- **Head** and Coordinator of Information Technology Program **Sept. 2021 – Feb. 2022**
- **Head** of Technology of Production, Processing and Transport of Petroleum Program Control

Faculty of Computers and Artificial Intelligence, Benha University, Egypt

- **Member** of the Computer Science Department Council **Oct. 2019 – Feb. 2022**
- **Head** of third year Control **Oct. 2018 – Feb. 2020**

UNIVERSITY MISSIONS

College of Engineering, A'Sharqiyah University, Oman (Cybersecurity program) **Sept. 2024 – Now**

Full Time

- Forensic Fundamentals and Investigations
- Cyber Ethics
- Fundamental of Cyber Security
- Ethical Hacking I
- Advanced Network Security and Forensics
- Cyber Forensics
- Biometric Authentication
- Data Backup and Recovery
- Secure Software Development
- Network Security & Cryptography
- Computational Thinking
- Risk Analysis and Management

Buraydah Collages, Buraydah, Al-Qassim, Saudi Arabia (Cybersecurity program)

Feb. 2022 – Jun. 2024

Full Time

- Ethical Hacking
- Project Management for IT
- Database management system
- Network Security
- Security Architecture and System Administration
- Computer Programming 1
- Information Risk Management
- Health Information Technology
- Database security
- Internet Security and Deliberations

- Part Time** **Sep. 2021 – Jan. 2022**
- Network Security
 - Security Architecture and System Administration
 - Internet Security and Deliberations
 - Special Topics in Computer Engineering 1
 - Software Project Management
 - IT Project Management

Industry and Energy Technology College, New Cairo Technological University, Cairo, Egypt

- Full Time (Ministry of Higher Education)** **Oct. 2021 – Feb. 2022**
- Computer Graphics
 - Advanced Java Programming
 - Computer Skills

High Institute for Computers and Management Information Systems, Cairo, Egypt

- Part Time** **March 2021 – July 2021**
- Fundamental of Structural Programming
 - Computer Applications for Reports Preparations
 - Cloud Computing Security

Higher Technological Institute, 10th of Ramadan City, Egypt

- Part Time** **March 2021 – July 2021**
- Distributed Systems
 - Neural Network

ACADEMIC EXPERIENCE

- Associate Professor** **Jun. 2022 – Present**
Computer Science, Faculty of Computers and Artificial Intelligence, Benha University, Qalyubia, Egypt
- Assistant Professor** **May. 2017 – Jun. 2022**
Computer Science, Faculty of Computers and Artificial Intelligence, Benha University, Qalyubia, Egypt
- Assistant Lecturer** **Jan. 2011 – May. 2017**
Computer Science, Faculty of Computers and Artificial Intelligence, Benha University, Qalyubia, Egypt
- Assistant Lecturer – Demonstrator** **Sept. 2008 – Jan. 2011**
Computer Science, Sinai University, Sinai, Egypt

TEACHING COURSES (Benha University)

- Ph.D. degree
 - Advanced Multi-Agents Systems
- Master's degree
 - Advanced Artificial Intelligence
 - Advanced Topics in Computer Science - 2 (Deep Learning)
- Master's degree (Faculty of Science -Benha University)
 - Computer Security and Network
 - Advanced database
- Bachelor's degree
 - Computer Graphics
 - Data Structure

-
- | | |
|-------------------------------------|--------------------|
| ▪ Computer Security and Network | ▪ Algorithms |
| ▪ Analysis and Design of Algorithms | ▪ Web Programming |
| ▪ Artificial Intelligence | ▪ Report Writing |
| ▪ Project Management Professional | ▪ Computer Vision |
| ▪ Programming Language using C++ | ▪ Logic Design |
| ▪ Modeling and Simulation | ▪ Multimedia |
| | ▪ Wireless Network |

EXPERIENCE

Technical Skills

- PhD of Computer Science in machine learning and deep learning using python
- 10+ years experience in academic teaching
- 7+ years experience in academic control
- Gained expertise in machine and deep learning tools such as keras and tensorflow using python

Teamwork Skills

- Strong collaboration skills by working with teams of more than 5 members for 5 years
- Member of the Library Committee at faculty of computer and artificial intelligence – Benha university
- Member in Graduation project Committee computer science department – Benha University

Leadership Skills

- Head and Coordinator of Information Technology Program, New Cairo Technological University, New Cairo, Egypt (2021-2022)
- Head of Technology of Production, Processing and Transport of Petroleum Program control, New Cairo Technological University, New Cairo, Egypt (2021-2022)
- Head of the third-year control at faculty of computers and artificial intelligence – Benha university (2017-2018)
- Assistant department head of the computer science at faculty of computers and artificial intelligence – Benha university (2017-2018)
- Chairman of the committee of library to purchase books from the Book Fairs (2017-2018)

Committees

- Served as the program member of the Master of Science in Cybersecurity program at A'Sharqiyah University (2024-2026).
- Served as the program member of the Bachelor of Science in Cybersecurity program at A'Sharqiyah University (2024-2026).

- Served as the member of the ABET Accreditation Committee within the Electrical Engineering and Computer Science (Cybersecurity) Department at A'Sharqiyah University (2024-2026).
- Responsible for reviewing and updating the College material on the website at A'Sharqiyah University (2024-2026).
- Prepared Self-Study for the Reaccreditation of the Electrical Engineering and Computer Science (Cybersecurity) Program at A'Sharqiyah University.
- Served as a member of the College Effectiveness Committee at Buraydah Collages (2022-2024).
- Defined and implemented the strategic plan for the Cybersecurity Department at Buraydah Collages (2022-2024).
- Participated in launching Moodle's open-source learning platform at Buraydah Collages (2022-2024).
- Defined and Implemented a Strategic Plan for the Academic e-Services Department to ensure proper integration of e-learning with curriculum delivery at Buraydah Collages (2022-2024).
- Developed curriculum for a Training Program based on the Learning Management Systems Moodle (basic and advanced levels) at Buraydah Collages (2022-2024).
- Provided all Colleges with various Moodle training sessions at Buraydah Collages in both Arabic and English at Buraydah Collages (2022-2024).
- Updated the Information Systems program curricula by introducing new courses reflecting new trends and, as part of the reaccreditation process for the cybersecurity program at Buraydah Collages (2022-2024).

Academic Skills

- Published over 40 publications with **over 5060** citations.
- Reviewer in more than 20 international journal.
- **Supervised** many postgraduate researchers with the following titles:
 - An Intelligent System for Plant Diseases Detection
 - Design of an Intelligent System for Improving Classification of Cancer Diseases
 - An Automated Detection System for Diagnosing of Leukemia Cancer in Blood Cells
 - Improve Face Synthesis based on Deep Learning
 - Enhancement Text to Image Synthesis Using Deep Learning
- Instructed lectures of more than 700 students to understand programming and algorithms concept through real world examples
- Teaching PhD and master students
- Member on judgement commission for Benha university student competition
- Teacher and interviewer at next technology leaders (NTL) responsible for deep learning nanodegree, python for everybody specialization, into to programming, front-end and full stack web developer nanodegree
 - Website: <http://techleaders.eg>

ACADEMIC PUBLISHING

- **Listed in World's Top 2% Scientists in 2022,2023,2024,2025 released by Stanford University and Scopus**
 - ❖ Ioannidis, John P.A. (2025), "August 2025 data-update for "Updated science-wide author databases of standardized citation indicators"", Elsevier Data Repository, V8, doi: 10.17632/btchxktzyw.8
 - ❖ Ioannidis, John P.A. (2024), "August 2024 data-update for "Updated science-wide author databases of standardized citation indicators"", Elsevier Data Repository, V7, doi: 10.17632/btchxktzyw.7
 - ❖ Ioannidis, John P.A. (2023), "October 2023 data-update for "Updated science-wide author databases of standardized citation indicators"", Elsevier Data Repository, V6, doi: 10.17632/btchxktzyw.6
 - ❖ Ioannidis, John P.A. (2022), "September 2022 data-update for "Updated science-wide author databases of standardized citation indicators"", Mendeley Data, V4, doi: 10.17632/btchxktzyw.4

SCIENTIFIC IMPACT CITATION INDICES

- **Citations:** over 5060
- **h-index:** 20
- **i10-index:** 25
- **Source:** scholar.google.com/citations?hl=en&user=kRSr78AAAAJ
- **Accessed:** 10-04-2026

PUBLICATIONS

- **M. Loey, M. E., H. S. M., H. M K.,** "Quantum-Inspired Hybrid Bald Eagle-Ukari Algorithm with Reinforcement Learning for Performance Optimization of Conical Solar Distillers with Sand-Filled Copper Fins: A Novel Bio-Inspired Approach", AI, 2026. **(Q1, IF: 5.0)**
- **M. Loey, H. M K.,** "Hierarchical Fuzzy System Integrated with Deep Learning for Robust and Interpretable Classification of Breast Malignancies Using Radiomics Features from Ultrasound Imaging", Computers, 2026. **(Q2, IF: 4.2)**
- **H. M. K., A. E., M. E., and M. Loey,** "Enhanced cybersecurity threat detection using novel tri-metaheuristic loss functions in generative adversarial networks with adaptive attention preservation for network traffic augmentation", Scientific Reports, 2026. **(Q1, IF: 3.9)**
- **A. M., W. M., G. A., M. M. K., A. M. Q., and M. Loey,** "Leveraging IoT and Marine Hydrological Data in Hybrid SARIMAX GRU Model for Tsunami Prediction", Journal of Earthquake and Tsunami, 2026. **(Q2, CiteScore: 3.4)**
- **H. M K., R. N A., M. E., M. Loey,** "Cross-domain thermal image augmentation for agricultural disease detection: a multi-crop validated framework with adaptive connectivity and optimized loss function", Signal, Image and Video Processing, 2026. **(Q3, IF= 2.1)**
- **Q. Abbas, Z. M. Saadi, B. S. Alfurhood, M. A. Mohammed, A. Aldweesh, M. Loey,** "A Hybrid BERT-Vision Transformer Framework for Multimodal Emotion Recognition Using Facial Expression and Text in Assistive Robotics for Disability

- Communication”, International Journal of Humanoid Robotics, 2025. **(Q3, IF= 1.6)**
- A. A. Mawgoud, M. Hamed N Taha, **M. Loey**, M. Hussain Malik, N. Eldeen Khalifa, “Enhancing Data Privacy and Trust in E-Learning: A Blockchain-Based Access Control Protocol for Cloud Educational Systems”, Concurrency and Computation: Practice and Experience, 2025. **(Q2, IF= 1.5)**
 - S. Maher, **M. Loey**, “Generating an image from Arabic text using generative network of fine-grained visual descriptions”, International Journal of Computer Science & Network Security, 2025.
 - G. Manogaran, N. Khalifa, **M. Loey**, M. Taha, “Cyber-physical Systems for Industrial Transformation: Fundamentals, Standards, and Protocols”, CRC Press, 2023 **[Book]**.
 - **M. Loey**, S. El-Sappagh, S. Mirjalili, “Bayesian-based optimized deep learning model to detect COVID-19 patients using chest X-ray image data”, Computers in biology and medicine, 2022. **(Q1, IF= 4.589)**
 - N. Khalifa, M. Taha, R. Chakraborty, **M Loey**, “COVID-19 Chest X-rays Classification Through the Fusion of Deep Transfer Learning and Machine Learning Methods”, PROCEEDINGS OF 7TH INTERNATIONAL CONFERENCE ON HARMONY SEARCH, SOFT COMPUTING AND APPLICATIONS (ICHSA 2022), 2022.
 - **M. Loey**, S. Mirjalili, “COVID-19 cough sound symptoms classification from scalogram image representation using deep learning models”, Computers in biology and medicine, 2021. **(Q1, IF= 4.589)**
 - N.E.M. Khalifa, **M. Loey**, S. Mirjalili, “A comprehensive survey of recent trends in deep learning for digital images augmentation”, Artificial Intelligence Review, 2021. **(Q1, IF= 8.139)**
 - M. Afify, **M. Loey**, A. Elsayy, “A Robust Intelligent System for Detecting Tomato Crop Diseases Using Deep Learning”, International Journal of Software Science and Computational Intelligence, 2022. **(Q3, IF= 0.57)**
 - N.E.M. Khalifa, G. Manogaran, M.H.N. Taha, **M. Loey**, “A deep learning semantic segmentation architecture for COVID-19 lesions discovery in limited chest CT datasets”, Expert Systems, 2021. **(Q2, IF=1.546)**
 - S. Maher, **M. Loey**, “Photo Realistic Generation from Arabic Text Description Based on Generative Adversarial Networks”, ACM Transactions on Asian and Low-Resource Language Information, 2021. **(Q4, IF= 1.471)**
 - R. Ghanem, **M. Loey**, “Face Completion Using Generative Adversarial Network with Pretrained Face Landmark Generator”, International Journal of Intelligent Engineering & Systems, vol.14, 2, 2021. **(Q3, CiteScore= 1.9, SJR= 0.19)**
 - N.E.M. Khalifa, F. Smarandache, G. Manogaran, **M. Loey**, “A Study of the Neutrosophic Set Significance on Deep Transfer Learning

Models: an Experimental Case on a Limited COVID-19 Chest X-ray Dataset”, Cognitive Computation, 2021. **(Q1, IF=4.307)**

- **M. Loey**, G. Manogaran, M.H.N. Taha, N.E.M. Khalifa, “A hybrid deep transfer learning model with machine learning methods for face mask detection in the era of the COVID-19 pandemic”, Measurement, vol.167, 1, 2021. **(Q1, IF=3.364)**
- **M. Loey**, G. Manogaran, M.H.N. Taha, N.E.M. Khalifa, “Fighting against COVID-19: A novel deep learning model based on YOLO-v2 with ResNet-50 for medical face mask detection”, Sustainable Cities and Society, 2020. **(Q1, IF=5.268)**
- **M. Loey**, G. Manogaran, N.E.M. Khalifa, “A deep transfer learning model with classical data augmentation and CGAN to detect COVID-19 from chest CT radiography digital images”, Neural Computing and Applications, 2020. **(Q1, IF=4.774)**
- N.E.M. Khalifa, **M. Loey**, A. Mawgoud, M.H.N. Taha, “EMPIRICAL STUDY AND ENHANCEMENT ON DEEP TRANSFER LEARNING FOR SKIN LESIONS DETECTION”, Journal of Theoretical and Applied Information Technology, vol.98, 9, 2020. **(Q3, CiteScore= 1.2, SJR= 0.23)**
- **M. Loey**, M. Naman, H. Zayed, “A Survey on Blood Image Diseases Detection Using Deep Learning”, International Journal of Service Science, Management, Engineering, and Technology (IJSSMET), vol.11, 3, 2020. **(Q2, CiteScore= 1.8, SJR= 0.25)**
- **M. Loey**, F. Smarandache, N.E.M. Khalifa, “Within the Lack of Chest COVID-19 X-ray Dataset: A Novel Detection Model Based on GAN and Deep Transfer Learning”, Symmetry, vol.12, 4, 2020. **(Q2, IF=2.645)**
- M. Loey, M. Naman, H. Zayed, “Deep Transfer Learning in Diagnosing Leukemia in Blood Cells”, Computers, vol.9, 2, 2020. **(Q2, CiteScore= 2.5, SJR= 0.36)**
- **M. Loey**, M.W Jasim, H.M EL-Bakry, M.H.N. Taha, N.E.M. Khalifa, “Breast and Colon Cancer Classification from Gene Expression Profiles Using Data Mining Techniques”, Symmetry, vol.12, 3, 2020. **(Q2, IF=2.645)**
- **M. Loey**, A. ElSawy, M. Afify, “Deep Learning in Plant Diseases Detection for Agricultural Crops: A Survey”, International Journal of Service Science, Management, Engineering, and Technology (IJSSMET), IGI, vol.11, 2, 2020. **(Q2, CiteScore= 1.8, SJR= 0.25)**
- N.E.M. Khalifa, **M. Loey**, M.H.N. Taha, “INSECT PESTS RECOGNITION BASED ON DEEP TRANSFER LEARNING MODELS”, Journal of Theoretical and Applied Information Technology, vol.98, 1, 2020. **(Q3, CiteScore= 1.2, SJR= 0.23)**
- N.E.M. Khalifa, **M. Loey**, M.H.N. Taha, “Deep Transfer Learning Models for Medical Diabetic Retinopathy Detection”, Acta Informatica Medica, vol.27, pp. 327-332, 2020. **(Q3, CiteScore= 0.85, SJR= 0.25)**
- A.A. Mawgoud, N.E.M. Khalifa, M.H.N. Taha, **M. Loey**, “Cyber Security Risks in MENA Region: Threats, Challenges and Countermeasures”, International Conference on Advanced Intelligent Systems and Informatics, pp. 912-921, 2019.

- **M. Loey**, H.M EL-Bakry, M.W Jasim, “Machine Learning in Gene Expression Profile for Central Nervous System Tumor Classification”, Journal of Convergence Information Technology, vol.14, pp. 49-60, 2019.
- M.W Jasim, H.M EL-Bakry, **M. Loey**, “Survey on Gene Selection Using Meta Heuristic Algorithms for Classifying Cancer Disease”, International Journal of Advanced Research in Computer Science & Technology, vol.6, pp. 19-27, 2018.
- A. El-Sawy, **M. Loey**, and H. EL-Bakry, “Arabic handwritten characters recognition using convolutional neural network,” WSEAS Transactions on Computer Research, vol. 5, pp. 11–19, 2017.
- A. El-Sawy, H. EL-Bakry, and **M. Loey**, “An intelligent agent tutor system for detecting Arabic children handwriting difficulty based on immediate feedback,” WSEAS TRANSACTIONS on SYSTEMS, vol. 15, pp. 63–72, 2016.
- A. El-Sawy, H. EL-Bakry, and **M. Loey**, “CNN for handwritten arabic digits recognition based on lenet-5,” in Proceedings of the International Conference on Advanced Intelligent Systems and Informatics 2016, vol. 533, pp. 566–575, Springer International Publishing, 2016.
- A. El-Sawy, **M. Loey**, and H. EL-Bakry, “Arab kids tutor (akt) system for handwriting stroke errors detection,” INTERNATIONAL JOURNAL OF TECHNOLOGY ENHANCEMENTS AND EMERGING ENGINEERING RESEARCH, vol. 4, pp. 42–49, 2016.
- H. N. Elmahdy and **M. L. Ramadan**, “Improving the performance of antigps signal,” in Proceedings of the 3rd WSEAS International Symposium on Wavelets Theory and Applications in Applied Mathematics, Signal Processing & Modern Science, WAV’09, (Stevens Point, Wisconsin, USA), pp. 17–22, World Scientific and Engineering Academy and Society (WSEAS), 2009.

ACADEMIC REVIEWER

- Reviewer for **IEEE International Conference on Sustainable Engineering & Digital Innovation (ICSEDI)**, Oman.
- Technical Paper Reviewer for **IEEE Transactions on Affective Computing**.
- Technical Paper Reviewer for **Scientific Reports**.
- Technical Paper Reviewer for **Discover Artificial Intelligence**.
- Technical Paper Reviewer for **Discover Computing**.
- Technical Paper Reviewer for **Discover Applied Sciences**.
- Technical Paper Reviewer for **BMC Endocrine Disorders**.
- Technical Paper Reviewer for **BioData Mining**.
- Technical Paper Reviewer for **Signal, Image and Video Processing**.
- Technical Paper Reviewer for **Discover Informatics**.
- Technical Paper Reviewer for **International Journal of Computational Intelligence Systems**.

- Technical Paper Reviewer for **BMC Pulmonary Medicine**.
- Technical Paper Reviewer for **International Journal of Data Science and Analytics**.
- Technical Paper Reviewer for **Plant Methods**.
- Technical Paper Reviewer for **International Journal of Machine Learning and Cybernetics**.
- Technical Paper Reviewer for **Research on Biomedical Engineering**.
- Technical Paper Reviewer for **PLOS ONE**.
- Technical Paper Reviewer for **IEEE Access**.
- Technical Paper Reviewer for **Cluster Computing**.
- Technical Paper Reviewer for **ACM Transactions on Asian and Low-Resource Language Information Processing**.
- Technical Paper Reviewer for **Wireless Personal Communications**.
- Technical Paper Reviewer for **Transactions of the ASABE**.
- Technical Paper Reviewer for **Arabian Journal of Geosciences**.

RESEARCH PROJECTS

Deep-Learning Face Detection Scheme for Highly Occluded Faces

- Principal Investigator: Dr. Abdulhakim Mohamed
- Funded by: A'Sharqiyah University
- Duration: 2024-2025
- Status: Completed

Bayesian-based optimized deep learning model to detect COVID-19 patients using chest X-ray image data

- Principal Investigator: Prof. Seyedali Mirjalili
- Funded by: Yonsei Frontier Lab
- Duration: 2020-2022
- Status: Completed

A Robust Intelligent System for Detecting Tomato Crop Diseases Using Deep Learning

- Principal Investigator: Prof. Ahmed Elsayy
- Funded by: Benha University
- Duration: 2019-2022
- Status: Completed

COVID-19 cough sound symptoms classification from scalogram image representation using deep learning models

- Principal Investigator: Prof. Seyedali Mirjalili
- Funded by: Yonsei Frontier Lab
- Duration: 2020-2021
- Status: Completed

Fighting against COVID-19: A novel deep learning model based on YOLO-v2 with ResNet-50 for medical face mask detection

- Principal Investigator: Prof. Gunasekaran Manogaran
- Funded by: University of California
- Duration: 2019-2020
- Status: Completed

A Study of the Neutrosophic Set Significance on Deep Transfer Learning Models: an Experimental Case on a Limited COVID-19 Chest X-ray Dataset

- Principal Investigator: Prof. Florentin Smarandache
- Funded by: University of New Mexico
- Duration: 2018-2020
- Status: Completed

A hybrid deep transfer learning model with machine learning methods for face mask detection in the era of the COVID-19 pandemic

- Principal Investigator: Prof. Gunasekaran Manogaran
- Funded by: Asia University
- Duration: 2018-2020
- Status: Completed

Within the Lack of Chest COVID-19 X-ray Dataset: A Novel Detection Model Based on GAN and Deep Transfer Learning

- Principal Investigator: Prof. Florentin Smarandache
- Funded by: University of New Mexico
- Duration: 2018-2019
- Status: Completed

A deep transfer learning model with classical data augmentation and CGAN to detect COVID-19 from chest CT radiography digital images

- Principal Investigator: Prof. Gunasekaran Manogaran
- Funded by: Asia University
- Duration: 2017-2019
- Status: Completed

Deep Transfer Learning Models for Medical Diabetic Retinopathy Detection

- Principal Investigator: Prof. Nour Eldeen M. Khalifa
- Funded by: Cairo University
- Duration: 2017-2019
- Status: Completed

Breast and Colon Cancer Classification from Gene Expression Profiles Using Data Mining Techniques

- Principal Investigator: Prof. Hazem El-bakry
- Funded by: Benha, Cairo, and Mansoura University
- Year of Sanction: 2017-2019
- Status: Completed

INTERNATIONAL CERTIFICATIONS

Deep Learning:

- Deep Learning for Business by Yonsei University on Coursera. Certification earned on September 7, 2017
- Neural Networks and Deep Learning by deeplearning.ai on Coursera. Certification earned on September 8, 2017

Machine Learning:

- Machine Learning, a 4-course specialization by University of Washington on Coursera. Specialization Certification earned on February 13, 2017

- Machine Learning Foundations: A Case Study Approach by University of Washington on Coursera. Certification earned on November 11, 2016
- Machine Learning: Clustering & Retrieval by University of Washington on Coursera. Certification earned on February 13, 2017
- Machine Learning: Classification by University of Washington on Coursera. Certification earned on January 2, 2017
- Machine Learning: Regression by University of Washington on Coursera Certification earned on November 28, 2016

Python:

- An Introduction to Interactive Programming in Python (Part 1) by Rice University on Coursera. Certification earned on February 15, 2017
- Programming for Everybody (Getting Started with Python) by University of Michigan on Coursera. Certification earned on November 11, 2016

Data Science:

- The Data Scientists Toolbox by Johns Hopkins University on Coursera. Certification earned on March 4, 2017
- Introduction to Data Science in Python by University of Michigan on Coursera. Certification earned on February 4, 2017
- Data Management and Visualization by Wesleyan University on Coursera. Certification earned on May 10, 2017
- Predictive Analytics Modeler (SPSS Modeler) by IBM. Certification earned on 2017

MATLAB:

- Introduction to Programming with MATLAB by Vanderbilt University on Coursera. Certification earned on November 7, 2016

Quality of Education:

- Strategic Planning
- University Lecturer Preparation
- External Review
- Self-Evaluation
- Programs and Curriculum maps Characterization

Algorithms:

- Algorithmic Toolbox by University of California on Coursera. Certification earned on October 28, 2017

AWARDS

- Winner of **First Place** in the Artificial Intelligence for Security and Surveillance Challenge at the Fifth Scientific Week 2024 (AFAQ), Military Technological College, represented by the PredictSafe team from A'Sharqiyah University.
- Received a **Certificate of Thanks and Appreciation** for being listed among the **World's Top 2% Scientists** from A'Sharqiyah University (2025).
- Received a **Certificate of Thanks and Appreciation** for being listed among the **World's Top 2% Scientists** from Benha University (2024).

- Received a **Certificate of Thanks and Appreciation** for being listed among the **World's Top 2% Scientists** from Benha University (2023).
- Received a **Certificate of Thanks and Appreciation** for being listed among the **World's Top 2% Scientists** from Benha University (2022).
- Honored at **Scientific Excellence Day 2021** for achievements in Scientific Research and International Publishing, Benha University.
- Honored at **Scientific Excellence Day 2020** for achievements in Scientific Research and International Publishing, Benha University.
- Won **Second Place** in the Olympics of Computing and Information, Kafrelsheikh University (2016–2017).
- Awarded **Best Academic Website** at Benha University (2014–2015).
- Awarded **Best Assistant Lecturer** at the Faculty of Computers and Informatics, Benha University (2015–2016).

GRANTS

- Received institutional research support for projects in Artificial Intelligence, Machine Learning, and Cybersecurity through academic collaborations.
- Participated in funded international research projects focused on healthcare AI, computer vision, and intelligent systems.
- Awarded an **NVIDIA Titan X Pascal GPU Grant** in 2017 to support advanced research in Deep Learning at Benha University.

COMPUTER SKILLS

Cybersecurity:

- Vulnerability Assessment: Nmap, Nessus, OpenVAS, Qualys
- Penetration Testing: Metasploit, Cobalt Strike
- Password Security Tools: John the Ripper, Hydra, Hashcat
- Operating Systems: Kali Linux, Windows, Linux

Digital Forensics:

- EnCase
- FTK Imager
- Autopsy
- Wireshark

Artificial Intelligence & Deep Learning:

- Python-based AI Development
- PyTorch
- TensorFlow
- Keras
- TFLearn
- Deep Learning using MATLAB

Machine Learning & Data Science:

- Scikit-learn
- Pandas
- NumPy
- SciPy
- Matplotlib
- Seaborn
- SPSS Modeler

Data Mining & Analytics:

- Weka
 - Orange
 - Statistical Analysis and Predictive Modeling
- Computer Vision & Image Processing:**
- OpenCV
 - MATLAB Computer Vision Toolbox
 - MATLAB Image Processing Toolbox
- Programming Languages:**
- Python
 - Java
 - C++
 - SQL
- Web Development:**
- HTML
 - CSS
 - JavaScript
 - jQuery
 - Bootstrap
 - PHP / MySQL
- Mobile Application Development:**
- Android Development using Java
- Other Technical Skills:**
- LaTeX
 - Microsoft Office Suite
 - Moodle LMS
 - Git / Version Control
 - Technical Report Writing

SPEECHES

- Delivered a lecture on Information Security at Qalyubia Security Directorate.
- Presented a seminar on How to Protect Your Privacy on Social Media at the Faculty of Nursing, Benha University.
- Delivered a presentation on A Pen-Based Intelligent System for Educating Arabic Handwriting at the Faculty of Education, Benha University.
- Conducted a lecture on How to Protect Your Privacy on Social Media at the Faculty of Computers and Artificial Intelligence, Benha University.
- Participated in academic seminars and awareness sessions related to Artificial Intelligence, Cybersecurity, and Digital Transformation.

HOBBIES

- Traveling and exploring new cultures
- Swimming and fitness activities
- Reading scientific and technology books
- Following recent developments in Artificial Intelligence and Cybersecurity
- Participating in academic and research discussions

REFERENCES

- Prof. Seyedali Mirjalili

- ali.mirjalili@torrens.edu.au
- ali.mirjalili@gmail.com
- Associate Prof. Nour Eldeen Khalifa
 - nourmahmoud@fci-cu.edu.eg
- Associate Prof. Heba Mohamed Khalil
 - heba.khalil@fci.bu.edu.eg