

# January Newsletter

2025

ISSUE#37



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“An investment in knowledge pays the best interest.”  
— Benjamin Franklin

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# PARTNERSHIPS



# Partnerships

## Memorandum of Understanding with the National Academy for Information Technology for Persons with Disabilities



Nile University is proud to announce the signing of a Memorandum of Understanding (MOU) with the National Academy for Information Technology for Persons with Disabilities (NAID), under the auspices of the Ministry of Communications and Information Technology (MCIT). This milestone underscores our unwavering commitment to fostering collaboration, advancing research, and driving innovation in assistive technologies. Through this partnership, we recognize the transformative power of innovation in promoting equity, accessibility, and social inclusion. It serves as a catalyst, inspiring us to actively engage in initiatives that bridge the gap between technological advancements and societal needs.

This agreement, signed by Prof. Wael Akl, President of Nile University, and Dr. Abdel Monem El Sharkawy, President of NAID, seeks to maximize scientific and research cooperation, facilitate knowledge exchange, and harness cutting-edge technologies to address mutual challenges.

The signing ceremony was attended by esteemed faculty members from the Faculty of Information Technology and Computer Science (ITCS) at Nile University, alongside distinguished officials from National Academy for Information Technology for Persons with Disabilities (NAID).

As part of this collaboration, a delegation from the Faculty of Information Technology and Computer Science conducted a field visit to NAID to gain firsthand insight into the academy's capabilities and explore potential avenues for cooperation. This visit offered valuable perspectives on how advanced technologies are strategically applied to empower individuals with disabilities and create an inclusive digital ecosystem.

At Nile University, we firmly believe in the transformative potential of education, research, and technology to foster inclusivity and create meaningful opportunities for individuals with disabilities. This partnership reaffirms our dedication to building a future where technology serves as an enabler for all.

# Partnerships

## Nile University Partners with the Egyptian Stock Exchange to Promote Financial Awareness and Investment Skills



Prof. Wael Akl, President of Nile University, and Dr. Ahmed El-Sheikh, President of the Egyptian Stock Exchange, have signed a cooperation protocol aimed at raising financial awareness and encouraging students to save and invest. This initiative aligns with the university's strategy to link academic education with the job market.

Prof. Wael Akl emphasized that this collaboration reflects the university's commitment to equipping its students with financial literacy and enhancing their investment skills. He noted that the university provides a pioneering experience in supporting entrepreneurship and startups.

The protocol aims to offer specialized lectures and introductory workshops on the principles of the stock market and simulation models. Additionally, it seeks to prepare student ambassadors from the university to promote investment awareness.

# ACHIEVEMENTS



# Achievements

Congratulations Dr. Wael Akl



We proudly congratulate Dr. Wael Akl on his appointment to the Engineering Studies Sector Committee at the Ministry of Higher Education and Scientific Research. Wishing him continued success in his new role as he contributes to advancing higher education and engineering excellence in Egypt.

# Achievements

## Nile University 2024 Research Achievements

As 2024 ends, Nile University proudly reflects on its remarkable research achievements this year, showcasing significant milestones in publications, citations, and global collaborations:

NU's total journal publications have exceeded the milestone of 1000.

For the first time in NU's history, the total number of journal publications equilibrium achieved with the total number of conference publications.

Although 2024 is not yet complete on Scopus, NU has already achieved 200 journal publications and a total of 312 publications overall. We expect to reach 350 publications by the end of the year, making it the highest in both publication quantity and quality.

Citations have exceeded 6500, with a continually rising curve. Additionally, for the first time, a single research paper has surpassed 1000 citations.

This year, NILES was the largest international conference in Egypt, with 281 papers submitted by 800 authors from over 110 universities and corporations.

Nile University has ranked first in Egypt for the highest number of research publications per faculty member for the last three consecutive years, according to the QS Arab University Rankings.

NU's undergraduate students have published more than 150 research papers and created over 330 Scopus profiles in the past five years, representing around 5% of the total student body. Several students have published more than five research papers during their studies, leading to full PhD scholarships from top 100 global universities.

These achievements demonstrate Nile University's commitment to advancing knowledge, promoting quality research, and empowering its students and faculty for global academic impact

# Achievements

## ARUD Students' Semester

Four senior students of the Architecture and Urban Design (ARUD) program at Nile University (NU) have returned from their semester abroad, once again showcasing the program's exceptional caliber and commitment to academic excellence.

Congratulations to the two ARUD students who completed their exchange semester in Bratislava, Slovakia, at the Slovak University of Technology (STU). Under the guidance of Dr. Milan Husar, Dr. Zuzana Ladzianska, Dr. Maroš Finka and Dr. Matej Jaško

at the Spectra Center of Excellence, they earned high commendations for their exceptional performance in courses such as Spatial Planning and Humanization Master courses. Additionally, they collaborated remotely with the ARUD Graduation Project team, led by Dr. Sameh Elfeki, to select their project site and develop their concepts, gaining valuable experience by working alongside international faculty and Erasmus+ master's students from diverse backgrounds.

Congratulations are also in order for the two ARUD senior students who completed their exchange semester at ISCTE – University Institute of Lisbon, Portugal. Coordinated by Prof. Teresa Marat-Mendes, they excelled in the Design Studio and Advanced Master's courses in Ecological Urbanism and Environmental Sustainability. Similarly, they worked on their graduation projects remotely with the ARUD Graduation Project team, selecting their site and refining their concepts under the guidance of Dr. Sameh Elfeki.

This remarkable achievement was made possible through the Erasmus+ International Credit Mobility (ICM) agreement between NU, STU, and ISCTE. Special thanks go to Dr. Dina K. Shehayeb, Ph.D., Professor and Program Director of the ARUD program, for her vision and dedication, which have been instrumental in fostering such invaluable international opportunities for ARUD students.





# Achievements

## UGRF Highlights & Achievements



The Undergraduate Research Forum (UGRF) at Nile University continues to inspire and showcase groundbreaking student innovations! This edition was a remarkable success, bringing together some of the brightest young minds in research and technology.

### Key Highlights:

**40+** Courses integrated with research

**230+** Projects presented across various disciplines

**70+** Awards recognizing outstanding work

**950+** Students pushing the boundaries of innovation

A huge congratulations to all participants, faculty, and mentors who made this possible! Your dedication to research and innovation is shaping the future.

# EVENTS



# Events

## Technology Management – The Key to Competitiveness and Wealth Creation



Dr. Tarek Khalil, Founding President of Nile University and IAMOT, emphasized the critical role of technology management in maintaining competitiveness and fostering economic growth. In his lecture at Nile University, attended by key industry leaders and officials, he highlighted that technology is a system built on knowledge, innovation, and research, not just a collection of tools.

Drawing from global examples like Japan and Germany, Dr. Khalil pointed out Egypt's historical leadership in technology, referencing ancient Egyptians as early tech innovators. He introduced a framework for mastering technology, understanding its methods, purpose, and timing—and categorized technology into various classifications, from emerging to appropriate technology.

He illustrated the impact of technological breakthroughs, from space exploration milestones like Sputnik to AI-driven digital transformation. Dr. Khalil concluded that nations must integrate technology-driven strategies for economic growth, job creation, and security, reinforcing Egypt's need to reclaim its pioneering role in innovation.

# Events

## One Community Embracing All Voices Event



We're proud to have hosted the transformative "One Community Embracing All Voices" workshop, a two-day journey toward mental health awareness and inclusivity.

With 10 incredible speakers from fields like mental health, education, and counseling including psychiatrists, certified coaches, and neurodiversity advocates, this event offered a wealth of knowledge to students, parents, and educators alike.

Key topics included emotional resilience, fostering inclusivity, and building collaborative support systems, equipping participants with practical tools to create a culture of understanding and empathy. Together, we're empowering communities to embrace diversity and strengthen bonds.

# Events

## Shaping the Future of Microelectronics: Prof. Ahmed Madian Joins Global Experts at ICM 2024



We are proud to announce that Prof. Ahmed H. Madian, ECE Program Director and Co-Founder of the Nanoelectronics Integrated Systems Center (NISC) at Nile University, participated as a panelist at the 36th International Conference on Microelectronics (ICM 2024), co-hosted by Hamad Bin Khalifa University (HBKU) and IEEE in Doha, Qatar.

During the discussion, the panel addressed pivotal topics shaping the future of the microelectronics industry in the Middle East and Arab countries, including:

- The region's role in driving microelectronics innovation
- The critical role of microelectronics in advancing AI, IoT, and quantum computing
- Opportunities within emerging economies and the Middle East's semiconductor ecosystem
- Key lessons from global leaders in the semiconductor industry

This engaging discussion highlighted opportunities to strengthen the region's role in global technology and foster innovation through collaboration between academia and industry.

Prof. Madian's participation underscores Nile University's dedication to advancing research and development in electronics, computer engineering, and related fields, contributing significantly to both regional and global technology landscapes.

# Events

## Improving Water Quality in the Middle East and North Africa

The School of Biotechnology and the NISC Research Center hosted an impactful event focused on Improving Water Quality in the Middle East and North Africa, bringing together experts and attendees to address one of the region's most critical challenges.



Key discussions revolved around:

- Combating pollution from industrial, agricultural, and domestic sources
- Implementing sustainable water management practices
- Utilizing IoT and machine learning for real-time water quality monitoring
- Empowering local communities to lead water quality initiatives

## NU R&D Series

The NUR&D Series 2025 kicked off on January 12-13, bringing together research assistants, teaching assistants, and researchers for an engaging two-day intensive training program. This event provided participants with essential skills and knowledge crucial for excelling in research and innovation. The series focused on a wide range of topics, including the fundamentals of research, techniques for understanding and analyzing research papers, and AI integration. Attendees also gained insights into scientific writing, publishing in applied sciences, and essential tools such as LaTeX and Overleaf. Additionally, soft skills training was integrated into the sessions, emphasizing the holistic development of researchers.



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Stay tuned for more research-focused events and opportunities!

# Events

## Pioneering Healthcare: Dr. Ahmed Soltan's Groundbreaking Presentation at the 2<sup>nd</sup> International Workshop on Biosensors

We are pleased to share that Dr. Ahmed Soltan, Director of the Nanoelectronics Integrated Systems Center (NISC) at Nile University, recently gave a talk at the 2nd International Workshop on Biosensors and Their Biomedical Applications.

The talk, titled “Wearable Device for Continuous Healthcare Monitoring and Self-Learning,” focused on the advancements in wearable technologies for continuous health monitoring and their integration with self-learning systems for improved patient care.

The workshop brought together experts from across the field to discuss emerging technologies in biosensors and their role in shaping the future of healthcare. Dr. Soltan's session was a key highlight, offering valuable insights into the potential impact of wearable devices in medical practice.



## Dr Ahmed Soltan's Engagement in Workshop on “Education and the Transmission of Hate Speech” in Tunisia

Dr Ahmed Soltan, Director of the Nanoelectronics Integrated Systems Center, was privileged to take part in the thought-provoking workshop on “Education and the Transmission of Hate Speech in Arab Countries and Germany” held in Tunisia.

During his presentation, Dr Soltan addressed the impact of technology on the quality of education, highlighting how technological advances influence educational processes. The workshop served as a valuable opportunity to engage in meaningful discussions about the challenges facing education across various disciplines and regions.



# Events

## The 6<sup>th</sup> Egyptian Bioinformatics Workshop



The 6th Egyptian Bioinformatics Workshop hosted over 1,000 attendees, including Egypt's leading scientists, researchers, and students in bioinformatics and biomedical sciences. Featuring panels on Omics, Vaccine Development, and Drug Design, the event showcased groundbreaking research and offered hands-on experiences. This milestone strengthened Egypt's bioinformatics community and its global scientific impact.



# UNIVERSITY FAIRS & VISITS



# University Fairs & Visits

## Spring Admission Discovery Tours



Spring admission was open and closed during the month of January. To assist prospective students and their families, three discovery tours were offered on campus, providing an opportunity to have all their questions answered. These tours were scheduled during winter break, allowing students from international schools to also participate and explore the campus.

## NU in Banha

NU visited Banha on the 8th of Jan to meet with students and parents from the International College of Banha who were eager to learn more about NU's programs.



## School Fairs

The Student Recruitment team expanded the reach in January by visiting 8 schools and connecting with prospective students and their parents.

Saint Fatima College Fair- SFS (National Division)

British School in Cairo

Notion International School (IB)

Sun of Glory International School

Highlands School of Egypt

Akhnaton School

New Castle International School (AD-IG-IB)

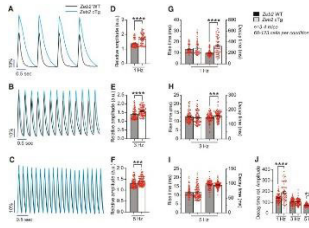
The International School of Chouefat



# PUBLICATIONS



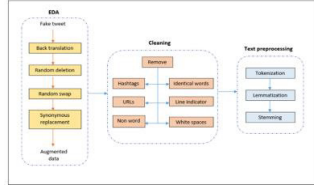
# NU Publications on Scopus during January 2025



**Hypoxia-responsive zinc finger E-box-binding homeobox 2 (ZEB2) regulates a network of calcium-handling genes in the injured heart**

**NU Authors: Arwa Kohela**

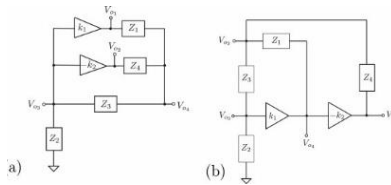
Source: Cardiovascular Research



**Arafakedetect: enhancing fake health news detection with ensemble learning on AraCovidVac**

**NU Authors: Ensaf Hussein Mohamed**

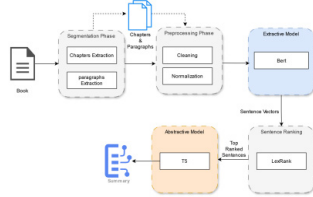
Source: Journal of Alloys and Compounds



**Review and novel contributions to amplifier-based oscillator design**

**NU Authors: Ahmed S. Elwakil**

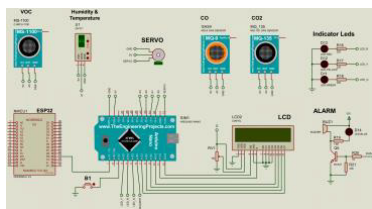
Source: AEU - International Journal of Electronics and Communications



**T5-LDSum: Leveraging T5 Transformer in Hybrid Abstractive-Extractive Long Document Summarization**

**NU Authors: Ensaf Hussein Mohamed**

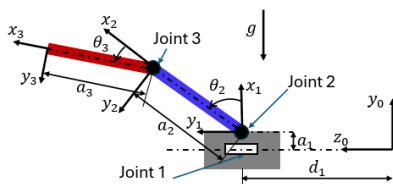
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



**Development of Real-Time In-Vehicle Air Quality Data Acquisition System**

**NU Authors: Hager Mohamed, Alan Procel, Tasneem Tarek Abdelkareem, Luis Sanchez, Mohamed A. Wahby Shalaby**

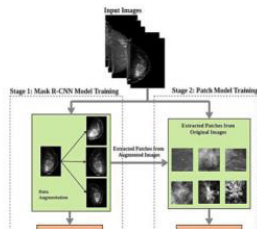
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



**Physics-Constrained Data-Driven Dynamic Modeling of Underactuated Robotic Systems**

**NU Authors: Ahmed Asker**

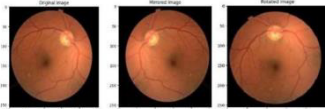
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



**A Comprehensive Two-Step Methodology for Automated Segmentation of Architectural Distortion in Mammograms**

**NU Authors: Ahmed Elnokrashy**

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

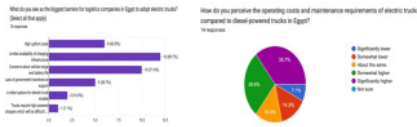


**Diabetic Retinopathy Detection: A PySpark-Driven Approach with VGG 16 Feature Extraction and MLP Classification**

**NU Authors: Toka Nabil, Sama Ayman, Samaa Ahmed, Mawada Nagy, Muhammad Megahed, Abdulmoniem Elsaed, Monier Ashraf, Khaled M. Fouad, Ibrahim Abdelbaky**

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

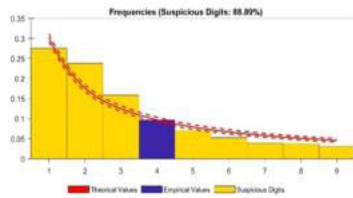
# NU Publications on Scopus during January 2025



## Electric Vehicles Utilization for Freight Transportation in Egypt: Opportunities and Challenges

**NU Authors:** Nour Abdullatif, Sally S. Kassem, Mohamed A. W. Shalaby

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Statistical Investigation of Scientific Journals Impact Factors in Relation to Benford's Law

**NU Authors:** Marwa A. Sorour, Yasmine A. Marey, Islam Tharwat Abdel-Halim, Mohamed Mahran Kasem

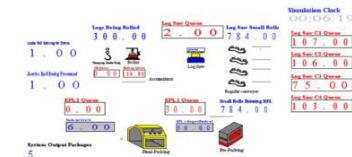
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Deep Learning Applications in Single-Cell Multi-Omics Analysis: A Review

**NU Authors:** Manar H Taha, Sahar A. Fawzi

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## An Integrated Framework for Modeling and Simulation Tool Selection and Implementation

**NU Authors:** Ahmed H. Salem

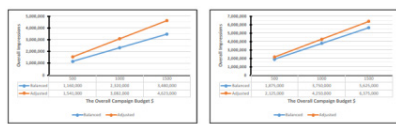
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Exploring State-of-the-Art Models in Arabic NLP: Insights into Multi-Label Text Classification

**NU Authors:** Abdullah Salem, Walaa Medhat Asal, Noha Gamaleldin

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## A Proposed Nonlinear Programming Optimization Model for Optimal Budget Mix of Digital Marketing Campaigns

**NU Authors:** SZakaria Yahia, Mostafa EIBolok

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

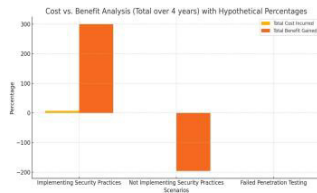


## Apache Spark Powered: Enhancing Network Intrusion Detection System Using Random Forest

**NU Authors:** Hesham Mamdouh, Mohamed Tarek, Abdelrahman Radwan, Adel Saeed, Ahmed Abdeen, Monier Ashraf, Khaled M. Fouad, Ibrahim Abdelbaky

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

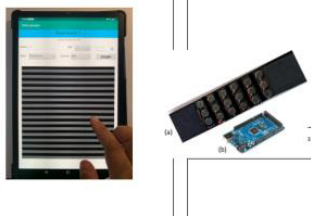
# NU Publications on Scopus during January 2025



## Penetration Testing: A Cost-Benefit Analysis of Best Practices Implementation for Software Startups

**NU Authors:** Ahmed Ali Gaafar, Khaled M. Fouad, Mohamed A. Sadek

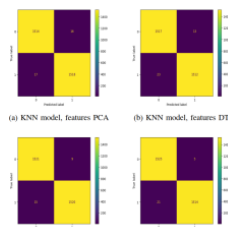
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Pattern Detection Using Vibration Feedback for Visually Impaired

**NU Authors:** Peter Sabry, Walid El-Atabany

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Advanced Phishing Detection in Ethereum Blockchain Transactions Using Machine Learning Models

**NU Authors:** Mohamed Ibrahim Ragab, Rawan Osama Bakr, Heba Kamal Aslan

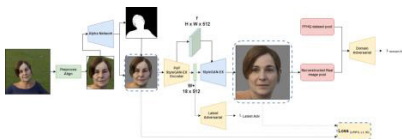
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## Ambulance Routing Optimization for CT-Ready Hospitals

**NU Authors:** Hazem Nasr Radwan, Sara Mahmoud Fakhry, Farida Ahmed Ismail, Habiba Yasser Mostafa, Laura Mostafa Ouf, Nadeen Nassef Shrab

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Synthetic to Real Human Avatar Translation via One Shot Pretrained GAN Inversion

**NU Authors:** Mahmoud Tamam, Walid Al-Atabany

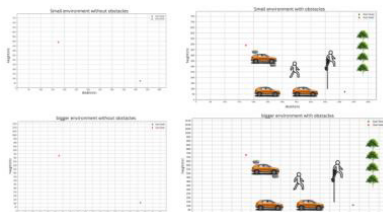
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 Title  
 Positive Selection Shapes Breast Cancer Tumor Suppressor Genes: Unveiling Insights into BRCA1, BRCA2, and MDC1 Stability  
 Authors  
 Youssef M. Fadel<sup>1</sup>, Marwan Khaled<sup>2</sup>, Nour H. Marzouk<sup>3</sup>, Habiba Abd-Elaty<sup>4</sup>, Wafaa M. Elrashedy<sup>5</sup>, Gehad Mostafa<sup>6</sup>, Salma alm Eldeen<sup>7</sup>, Mohaned Bador<sup>8</sup>, Mohamed El-Hadidi<sup>9</sup>  
 Keywords  
 Breast cancer, Positive selection, Tumor suppressor genes, BRCA1, BRCA2, MDC1, Genetic stability  
 Abstract  
 Breast cancer is a leading cause of cancer-related death. Understanding the genetic factors influencing its development and progression is crucial for improving diagnosis and treatment. This study investigates the role of positive selection in shaping the evolution of breast cancer tumor suppressor genes, specifically BRCA1, BRCA2, and MDC1. We analyzed the genetic diversity and selection pressures acting on these genes across different populations. Our results reveal that positive selection has significantly shaped the evolution of these genes, particularly in the regions responsible for DNA repair and tumor suppression. This finding suggests that these genes are under strong selective pressure to maintain their function, and any mutations that disrupt this function are likely to be deleterious. Our study provides valuable insights into the genetic architecture of these genes and highlights the importance of positive selection in their evolution. This knowledge can be used to develop more effective diagnostic and therapeutic strategies for breast cancer.

## Positive Selection Shapes Breast Cancer Tumor Suppressor Genes: Unveiling Insights into BRCA1, BRCA2, and MDC1 Stability

**NU Authors:** Youssef M.Fadel, Marwan Khaled, Nour H. Marzouk, Habiba Abd-Elaty, Wafaa M. Elrashedy, Gehad Mostafa, Salma alm Eldeen, Mohaned Bador, Mohamed El-Hadidi

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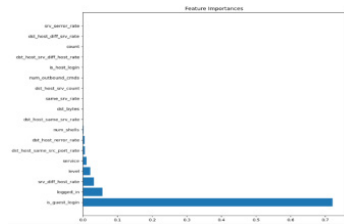
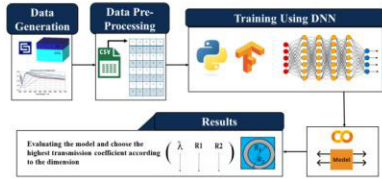


## Navigating Complexity: Data Structure Impact on Path Planning Algorithms in Autonomous Systems

**NU Authors:** Hend Emad, Mai S.Mabrouk, Ahmed F.Elnokrashy

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

# NU Publications on Scopus during January 2025



## Deep Learning-Driven Design of Plasmonic Optical Coloring Filters

**NU Authors:** Pansee S. Elessawy, Mai O.Sallam, Yasser M. El-Batawy

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

## Intelligent System for Intrusion Detection Based on Machine Learning

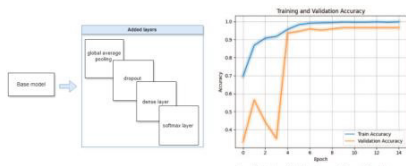
**NU Authors:** Mohamed Ibrahim Ragab, Khaled M. Fouad

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

## Brain Tumor MRI Images Classification Using Fine-Tuned Deep Learning Models

**NU Authors:** Mahmoud A. Tolba, Bahaa S. Atia, Michal A. William, Arwa K. Noureldin, Sama G. Ragab, Silvana N. Mansy, Mennatallah A. Ramadan, Mai S.Mabrouk

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Assisting Visually Impaired Subjects Using Large Language Models: A Comprehensive Evaluation

**NU Authors:** Heidi Ahmed Holiel, Sahar A. Fawzi, Walid Al-Atabany

Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings

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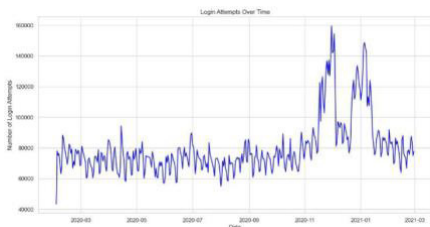
Document type: Conference Paper  
 Source type: Conference Proceedings  
 DOI: 10.1019/NILES.2024.207326  
 ISSN: 1976-8002/2024/1  
 Save all to author list

<sup>1</sup>Center for Informatics Science, Nile University, Medical Imaging and Image Processing Research Group, Sheikh Zayed City, Egypt  
<sup>2</sup>Cairo University, Systems and Biomedical Engineering Department, Giza, Egypt  
<sup>3</sup>Helwan University, Biomedical Engineering Department, Helwan, Egypt

## Enhanced Security Through Intelligent Risk-Based Authentication: Leveraging Big Data and Machine Learning for Real-Time Threat Mitigation

**NU Authors:** Ahmed A. Megahed, Mohamed F. Arnous, Youssef Elmoataz, Ahmed Moussa, Seif Haitham, Mark Hany

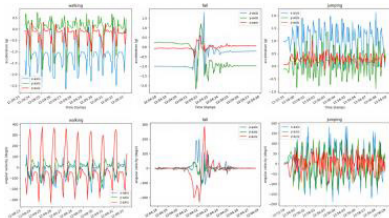
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



## Motion Sensor-Based Fall Detection Using 1D-FCN

**NU Authors:** Yara Abdelghany Mahfouz, Sahar A. Fawzi

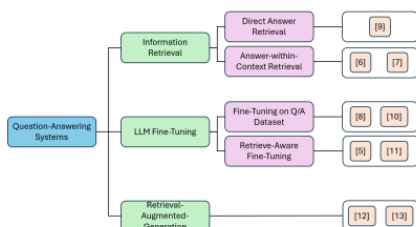
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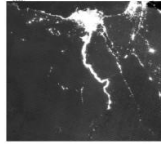
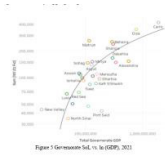
## CodeQA: Advanced Programming Question-Answering Using LLM Agent and RAG

**NU Authors:** Mohamed Ahmed, Mostafa Dorrah, Ahmed Ashraf, Yousef Adel, Abdelrahman Elatrozy, Bahaa Eldin Mohamed, Wael Gomaa

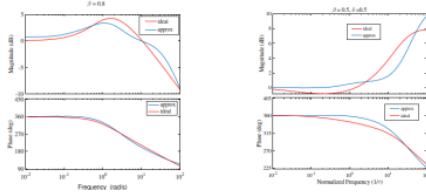
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



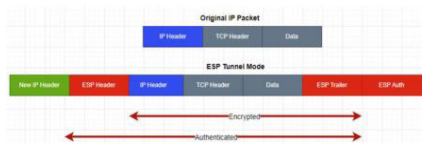
# NU Publications on Scopus during January 2025



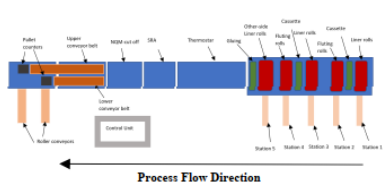
**Using Night-Time Light for Technology Diffusion Analysis**  
**NU Authors: Amr Hashem, Hassan El Sabry, Tarek M. Khalil**  
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



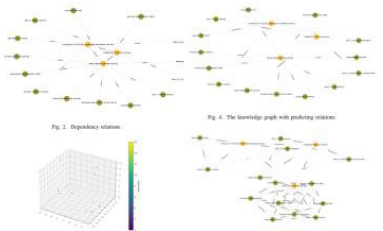
**Complex-Order Single-Dispersion Models**  
**NU Authors: Amr Hashem, Hassan El Sabry, Tarek M. Khalil**  
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



**Rigorous Assessment of 5G O-RAN Security Protocol Stack**  
**NU Authors: Ahmed Said Abdel-Sattar, Nashwa Abdelbaki**  
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



**Waste Minimization in Corrugated Sheets Manufacturing: A Statistical Approach for Optimal Operating Conditions**  
**NU Authors: Fatma Khedr, Yara H. Elkassaby, Ahmed H. Salem**  
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



**A Comparative Analysis of Large Language Models for Automated Course Content Generation from Books**  
**NU Authors: Abdelrahman Lotfy, Ahmed Ashraf, Mariam Barakat, Kirollos Saleh, Eslam Ahmed, Bassel Sherif, Ali Nasser Badawy, Ghada Ahmed Khoriba**  
Source: NILES 2024 - 6th Novel Intelligent and Leading Emerging Sciences Conference, Proceedings



# STUDENT LIFE



# Student Life

## IEEE: IEEE Circuits and Systems Student Design Competition



The First-Ever IEEE Circuits and Systems Student Design Competition (CASS) in Egypt was held at Nile University. This exciting event provided a platform for students to showcase their talents in Circuits and Systems, marking a significant milestone for innovation in the region.

Competition Highlights:

Phase One: Local Level:

Participants submitted projects for evaluation by expert judges.

- Selected teams received FREE IEEE CASS Memberships and advanced to the regional stage.
- Winners win a grand cash prize of 10,000 EGP

Phase Two: Regional Level:

- Teams competed in region 8 (Africa, Europe, and the Middle East).
- Advancing teams were awarded travel grants worth \$1,200–\$1,700.

Phase Three: Global Level:

Finalists will compete at ISCAS 2025 in London for a grand prize of \$3,000.

Event Recap:

- 20 teams participated after passing the selection phase.
- 2 teams were high school students, showcasing inclusivity and talent diversity.

This competition was the starting point of a larger journey, paving the way for local participants to compete at global levels. The event successfully inspired innovation, collaboration, and creativity among aspiring engineers and innovators.

# ALUMNI



# Alumni

## NU Alumni Spotlight: Omar Elghandour's Academic Journey in Autonomous Systems & Robotics



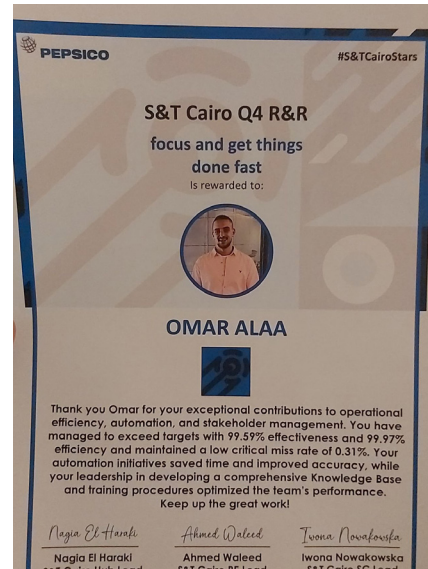
We are proud to celebrate the achievements of Omar Elghandour, an exceptional Nile University alumnus who graduated in 2022 with a bachelor's degree in Mechatronics Engineering with the highest honor. Omar recently embarked on an exciting academic journey, joining the Universität Klagenfurt to pursue a master's degree in information and communications engineering (ICE), specializing in Autonomous Systems and Robotics (ASR).

This incredible opportunity, supported by a scholarship, reflects Omar's dedication to innovation and technological advancement. His time at Nile University's Mechatronics Track provided him with a strong foundation in engineering, preparing him to excel in the rapidly evolving fields of robotics and autonomous systems.

We look forward to witnessing Omar's future accomplishments and the impact he will make in the field.

# Alumni

## Alumni Spotlight: Omar Alaa Soliman Recognized by PepsiCo



We are proud to celebrate the achievements of Omar Alaa Soliman, an NU alumnus who graduated with a bachelor's degree in industrial engineering. Omar has been making strides in the supply chain field, currently working as a Supply Chain FCT Assistant Analyst at PepsiCo's Cairo Capability Center, a role he has held for the past 10 months.

Recently, Omar was recognized by PepsiCo in the S&T Cairo 2024 Q4 R&R, a well-deserved acknowledgment of his dedication and contributions. This recognition marks a significant milestone in his professional journey, highlighting his commitment to excellence and innovation in supply chain management.

At NU, we take pride in seeing our alumni thrive and make an impact in their respective fields. Congratulations, Omar! We look forward to witnessing your continued success.

# Alumni

## Celebrating the Achievements of NU PG Alumni Ahmed Safwat



We are proud to spotlight the accomplishments of Ahmed Safwat, an esteemed NU postgraduate alumnus who continues to excel in his professional journey. Ahmed earned his master's degree in communication and information technology in 2022 and previously completed his Big Data & Data Science Professional Diploma in 2018.

Currently serving as a Telco Cloud Architecture Expert at STC, Ahmed has been recognized for his outstanding contributions, receiving appreciation and recognition from STC for the year 2024. This honor reflects his dedication and expertise in the field of telecommunications and cloud architecture.

Additionally, Ahmed has achieved a significant milestone by obtaining the TOGAF 10 Enterprise Architecture Certification, successfully completing both the Foundation and Practitioner levels months ago. This certification further solidifies his expertise in enterprise architecture, positioning him as a leader in the industry.

Congratulations to Ahmed on his well-deserved recognition and accomplishments! We look forward to witnessing more of his success in the future.

# Alumni

## NU PG Alumni Success Story: Mohamed Soliman



Mohamed Soliman, a distinguished Nile University postgraduate alumnus, earned his master's degree in communication and information technology, majoring in information security. He recently joined CyberKnight as a regional cybersecurity consultant for Egypt, the Levant, and Africa, where he plays a vital role in strengthening cybersecurity solutions across the region.

Mohamed's career journey is marked by outstanding achievements in the cybersecurity field. Previously, he held the position of Senior Security Solutions Architect at BARQ Systems, where he contributed to designing and implementing cutting-edge security solutions. His expertise has also been honed through roles in several renowned technology firms, where he played a key role in fortifying digital infrastructures and mitigating security threats.

Mohamed exemplifies leadership and innovation in the ever-evolving world of cybersecurity. We are proud to celebrate his achievements and wish him continued success in his impactful career.

# Alumni

## Alumni Spotlight: Khaled ElPrince Emary's Promotion to Regional Manager, Egypt & Africa at DataPatrol



DATA PATROL

We are proud to celebrate the success of Khaled ElPrince Emary, who graduated with a Master of Engineering in 2023 and has recently been promoted to Regional Manager, Egypt & Africa at DataPatrol!

Khaled has played a pivotal role in DataPatrol's success, contributing to remarkable achievements in Egypt over the past year. His leadership and dedication helped the team surpass their goals, drive significant regional growth, and solidify DataPatrol's impact in the market. His promotion is a testament to his hard work, strategic vision, and the strong support he has received from his team and direct manager.

We congratulate Khaled on this well-deserved milestone and wish him continued success in his journey!