IMSA 2025 Conference Agenda

International Conference on Intelligent Methods, Systems, and Applications 25
July 12-13, 2025

Saturday, July 12, 2025

Time	Sessions/Events				
09:00 AM - 09:30 AM	Registration				
09:30 AM - 10:00 AM	Opening Session				
10:00 AM - 10:30 AM	Keynote Speaker (Dr. Mahmoud Elsisi)				
10:30 AM - 11:00 AM	Company Seminar (Reso) AI advancements shaping industry practice				
11:00 AM - 11:30 AM	Coffee Break				
11:30 AM - 01:30 PM	**NLP** Room C111 *Chair: Walaa Ashmawy* *Co-Chair: Zeinab Taha* Papers: 320, 324, 328, 329, 360, 363	**Modeling and Simulation** Room C114 *Chair: Mohamed Mostafa Eltaweel* *Co-Chair: Ali Khater* Papers: 17, 41, 106, 311, 379	**AI** Room C116 *Chair: Fatma Emara* *Co-Chair: Hesham Mansour* Papers: 114, 377, 386, 391, 392	**NLP** Room C112 *Chair: Ashraf Abdelraouf* *Co-Chair: Mohamed Amir* Papers: 43, 51, 59, 68, 110, 308	**CV** Room C117 *Chair: Samar Nour* *Co-Chair: Rabab Nabawy* Papers: 387, 388, 400, 406, 415
01:30 PM - 02:00 PM	Break				
02:00 PM - 04:00 PM	**Online** Room C117 *Chair: Noha Ramadan* *Co-Chair: Mohamed Labib* Papers: 7, 29, 40, 87, 96, 134, 136	**CV** Room C114 *Chair: Hossam Mekway* *Co-Chair: Samar Adel* Papers: 306, 316, 325, 330, 333, 335	**ML** Room C112 *Chair: Amaal Aboutabl* *Co-Chair: Ahmed Elshamy* Papers: 318, 364, 381, 382, 408, 418	**AI** Room C111 *Chair: Noha Gamal Saad* *Co-Chair: Maha Hatem* Papers: 341, 352, 362, 367, 370	**Networks** Room C116 *Chair: Nermin Hamza* *Co-Chair: Amr elmaghraby* Papers: 38, 39, 58, 186, 348

Sunday, July 13, 2025

Time	Sessions/Events				
09:30 AM - 10:00 AM	Registration				
10:00 AM - 10:30 AM	Keynote speaker (Dr.Ahmed Ragab)				
10:30 AM - 11:00 AM	Company Seminar (Fortinet) Cybersecurity Interactive Workshop				
11:00 AM - 11:30 AM	Coffee Break				
11:30 AM - 01:30 PM	**AI** Room C111 *Chair: Mohamed Tahrwat* *Co-Chair: Nermin Kamal* Papers: 13, 50, 127, 157, 289	**Software Engineering** Room C116 *Chair: Eman helal* *Co-Chair: Marwa Soliman* Papers: 130, 137, 138, 155, 177, 417	**Bioinformatics & Health Informatics** Room C114 *Chair: Abdelaziz Ahmed* *Co-Chair: Mohamed Nagy* Papers: 98, 105, 115, 317, 332, 393	**CV** Room C112 *Chair: Shaira Azzab* *Co-Chair: Moataz Samy* Papers: 60, 80, 131, 149, 274, 294	**NLP** Room C117 *Chair: Sherif Eletriby* *Co-Chair: Wael Gomaa* Papers: 169, 222, 349, 383, 407, 419
01:30 PM - 02:00 PM	Break				
02:00 PM - 04:00 PM	**HCI** Room C116 *Chair: Seif Eldawlatly* *Co-Chair: Mohamed Hossam* Papers: 305, 354, 399, 404, 411, 412	**AI** Room C111 *Chair: Amr Sabry* *Co-Chair: Ali Somai* Papers: 139, 327, 375, 398, 403	**CV** Room C112 *Chair: Samer Ibrahim* *Co-Chair: Zeinab Taha* Papers: 53, 292, 368, 410, 420	**ML** Room C114 *Chair: Yehia Elhalwagy* *Co-Chair: Yasmin Farouk* Papers: 92, 150, 237, 291, 301, 302	**Online** Room C117 *Chair: Ibrahim Eldesouki* *Co-Chair: Farid Ali* Papers: 146, 162, 281, 295, 336, 345, 361
04:00 PM - 04:30 PM	Closing Ceremony				

IMSA 2025 CONFERENCE AGENDA

Session 1 - NLP

Session 1

ROOM:	C111	**TOPIC:**	NLP
START:	Jul 12, 2025, 11:30 AM	**END:**	Jul 12, 2025, 01:30 PM

Chair: Walaa Ashmawy

Co-Chair: Zeinab Taha

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
320	Ensemble Transformers for Arabic Medical Text Classification	*Elashry, Malak*; Abouramadan, Rokaia; Hamdi, Ali*	11:30 AM
324	Unraveling Paraphrase Detection: A Deep Dive into Transformer Models using the MRPC dataset Before LLMs	*Walid Abdelsalam, Farah*; Safwat Elewa, Mariam ; Hassan Gomaa, Wael*	11:50 AM
328	From LSTM to Chronos: Evaluating Deep Learning Models for Predictive Maintenance	*Benzine, Fatima Khadija*; BELDJOUDI, Samia; Benzine, Abdallah Zakaria; ZOUAGHI, Iskander; Haouari, Fouad; SERIDI, Hassina*	12:10 PM
329	Attentional Language Modeling for Text to 3D Generation	*Labib, Marena*; Hamdi, Ali*	12:30 PM
360	Arabic Symptom Classification and Diagnosis Using Transformer Models and LLM-Based Augmentation	*Allam, Abdulrahman*; Ahmed, Seifeldein; Hamdi, Ali; Mohammed, Ammar*	12:50 PM
363	Few-Shot Prompting for Improved Span-Level Understanding of Quranic Question Answering	*Basem, Mohamed*; Oshallah, Islam ; Hamdi, Ali ; Mohamed, Ammar*	01:10 PM

Session 2 - Modeling and Simulation

Session 2

ROOM:	C114	**TOPIC:**	Modeling and Simulation
START:	Jul 12, 2025, 11:30 AM	**END:**	Jul 12, 2025, 01:30 PM

Chair: Mohamed Mostafa Eltaweel

Co-Chair: Ali Khater

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
17	**Deformation Prediction of Ground Radar Based on GRUU-Net With Attention Mechanism Model**	*Helmy, Islam; Fayed, Mohamed*; Schenk, Andreas; Hexel, Rene; Tuxworth, Gervase*	**11:30 AM**
41	**Solution of Time-Dependent Schrödinger Equation using Physics-based Neural Network**	*Mahmud, Istiak*; Abdelhadi, Ahmed*	**11:50 AM**
106	**Artificial Intelligence based Multiport converter for Seamless Integration of Hybrid energy sources**	*A. Mahmoud, Alaa; Aymen, Mahmoud*; A. Hafez, Ahmed*	**12:10 PM**
311	**From Formal Models to Learned Dynamics: a Continuous Petri Net–Neural Network Framework for Liver Iron Metabolism**	*Selim, Arwa*; Ismail, Amr; Salama, Ahmed; Herajy, Mostafa*	**12:30 PM**
379	**Optimizing Dynamic Computing Environments Using Adaptive Intelligent Load Balancing**	*Diab, Ahmed*; Ashour, Mohamed*	**12:50 PM**

Session 3 - AI

Session 3

ROOM:	C116	**TOPIC:**	AI
START:	Jul 12, 2025, 11:30 AM	**END:**	Jul 12, 2025, 01:30 PM

Chair: Fatma Emara

Co-Chair: Hesham Mansour

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
114	Developing Hexapod Locomotion Through Reinforcement Learning	*Taha, Mohammed**	11:30 AM
377	Deep Learning-Based Multi-Class Diagnosis of Lung Diseases from Chest X-Ray Images	*Essmat, Reem*; solyman, marwa; essam, raghda*	11:50 AM
386	Cashflow AI: An Intelligent Financial Management System for Small Businesses and Retailers	*abdelazim, ziad*; Mohamed, AbdAlrhman; Sayed, Malak; fouad, Omar; radwan, ziad; elshafei, Eng.omar; Ali , Dr.raghda*	12:10 PM
391	Adaptive Urban Pathfinding Using Deep Learning and Heuristic Optimization	*Abo El-Ela, Mohamed*; Hamdi, Ali*	12:30 PM
392	Dual-Path LSTM and Cross-Attention Network for Richer Image Captioning	*Nagib, Abdelrahman*; Mahmoud Abd El-Wahab, Mohamed; Khater Mohamed, Ali; Omara, Fatma A.*	12:50 PM

Session 4 - NLP

Session 4

ROOM:	C112	**TOPIC:**	NLP
START:	Jul 12, 2025, 11:30 AM	**END:**	Jul 12, 2025, 01:30 PM

Chair: Ashraf Abdelraouf

Co-Chair: Mohamed Amir

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
43	**Empathetic AI for Mental Health: A Comparative Study of Retrieval-Augmented Language Models in CBT Applications**	*Yahia, Ahmed*; Amin, Ahmed; Bakry, Mohamed; Radwan, Nada; Yossef, Nourhan; Ahmed, Ibrahim; Saad, Noha Gamaleldin*	11:30 AM
51	**Refining Two Convolutional Neural Networks Architectures for Image Classification Applications**	*Ouda, Lara*; Wagdy, Verina; Elkhouly, Ola; Edward, Phoebe*	11:50 AM
59	**AI-Based Examination Content Creation: Evaluating Large Language Models for Question Generation**	*Abdelhamied, Shahd*; Khaled, Kenzy; Mohamed, Cecilia ; Khaled, Mohamed; Mohamed, Zeyad ; Gamal, Noha*	12:10 PM
68	**A Transformer-Driven Bilingual Approach to Arabic Text Summarization**	*Younes, Mohamed; Hany, Mohammed*; Osama, Abdelhakim; Saad, Noha*	12:30 PM
110	**Smart Review Analyzer: A Multiplatform AI System for Aspect-Based Sentiment Analysis on E-commerce Products**	*Mohamed, Soha**	12:50 PM
308	**Fusion Strategies for Embedding Models: Enhancing Text Representations Across MTEB Tasks Through Lightweight and Trainable Ensembles**	*Akl, Amr*; Hamdi, Ali*	01:10 PM

Session 5 - CV

Session 5

ROOM:	C117	**TOPIC:**	CV
START:	Jul 12, 2025, 11:30 AM	**END:**	Jul 12, 2025, 01:30 PM

Chair: Samar Nour

Co-Chair: Rabab Nabawy

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
387	Smart System for Monitoring Student Behavior	ELShamy , Ahmed *; salah, armia; taha, ahmed	11:30 AM
388	Enhanced Deepfake Detection Using Customized Residual Network Architectures and Cross-Dataset Evaluation	Hamza, Abdelrahman*; Mohamed, Abdullah; Mahmoud, Samar	11:50 AM
400	Advancing Zebrafish Behavioral Analysis: A Synergistic YOLOv8-DeepSORT Framework for Precision Tracking	Aboud, Haidy*; Tarek, Hanan; Atia, Ayman	12:10 PM
406	MSA University Campus Indoor Navigation and positioning System Using Augmented Reality	Elghayesh, Aly*; Mekawey, Hosam	12:30 PM
415	Deep Augmented Object Detection for Waste Material Recognition	Labib, Marena*; Hamdi, Ali	12:50 PM

Session 6 - Online

Session 6

ROOM:	C117	TOPIC:	Online
START:	Jul 12, 2025, 02:00 PM	END:	Jul 12, 2025, 04:00 PM

Chair: Noha Ramadan

Co-Chair: Mohamed Labib

Presentations (7)

PAPER #	TITLE	AUTHORS	START TIME
7	A Hybrid Trust-Enhanced Multi-Criteria Recommender System for Dynamic Tourism Recommendations	*Badouch, Mohamed*; Boutaounte, Mehdi*	02:00 PM
29	MQDEB-HTGRU: A Machine Learning Methodology for Measuring the Quality of Untrusted Off-Chain Data Entering Blockchain	*Sayed Younis Mohamed, Abdelrhman*; A.T.F. Taj-Eddin, Islam; M. Omar, Nagwa; M. Ibrahim, Hosny*	02:20 PM
40	Scaling Byzantine Consensus: A Sharded and Pipelined Approach for Permissioned Blockchains	*Labib, Mohamed*; Aslan, Heba; Arafa, Tamer*	02:40 PM
87	Enhancing Automated Prostate Cancer Diagnosis in Histopathology Whole-Slide Images using Weighted-Average Ensembling	*Mohammed, Mahmoud*; Farouk, Mamdouh; Hussain, Khaled; Abo El-Magd, Adel*	03:00 PM
96	Universal Medical Imaging Model for Domain Generalization with Data Privacy	*Radwan, Ahmed*; Osman, Islam; Shehata, Mohamed*	03:20 PM
134	Smart Agriculture Clinic (SAC): A Transformative Technology-Based Solution to Agriculture Extension Problems in Egypt	*Elattar, Mustafa*; Youssef, Ahmed; Naeem, Elsayed; Elhelw, Mohamed; Atwa, Atwa*	03:40 PM
136	An AI-Based Framework for Detection of Toxicity Levels from Oil and Gas Flaring from Video Streams	*Muhammad, Esraa; Hassan , Yomna ; Aboulhassan, Amal**	04:00 PM

Session 7 - CV

Session 7

ROOM:	C114	**TOPIC:**	CV
START:	Jul 12, 2025, 02:00 PM	**END:**	Jul 12, 2025, 04:00 PM

Chair: Hossam Mekway

Co-Chair: Samar Adel

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
306	Deep Learning-Based Segmentation of Periapical and Periodontal Regions in Radiographic Images with U-Net	Rizk, Mohamed*; Abd Elhalim, Zeinab; El Fadaly, Lamya	02:00 PM
316	FireModelAI: A Smart Framework for Fire Detection, Localization, and Classification Indoors	Othman, Mohamed*; Ayoub, Ahmed	02:20 PM
325	Drone-Based Face Detection and Collision Avoidance Framework	Farwiz, Mostafa*; Sabry, Mohamed; Hamed, Mohamed; Elmahdy, Hesham	02:40 PM
330	Dynamic Scene Understanding from Dashcam Videos using YOLO Detection, Monocular Depth Estimation, and Attention-Based Autoencoders	Tadros, Daniel*; AbdelRaouf, Ahmed; Mahmoud, Samar	03:00 PM
333	Enhancing Tomato Leaf Disease Detection with Deep Learning and Augmentation Techniques	tarek, shahd*; Hamdi, Ali	03:20 PM
335	Comparative Evaluation of Modular Deep Learning Pipelines for Student Engagement Detection	Salem, Mahmoud*; Mohamed, Abdallah; Shehata, Mohamed	03:40 PM

Session 8 - ML

Session 8

ROOM:	C112	**TOPIC:**	ML
START:	Jul 12, 2025, 02:00 PM	**END:**	Jul 12, 2025, 04:00 PM

Chair: Amaal Aboutabl

Co-Chair: Ahmed Elshamy

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
318	**Advancing Quranic Semantics BERT Based Verse Relationship Classification**	*Khalaf, Youssef*; Hatem, Abdelmonem; Taha, Mohamed; Soltan, Mohamed; Gomaa, Wael*	02:00 PM
364	**AI-Driven Personalized Meal Recommendation System for Diabetes Management**	*Elhendawy, Adham*; Hesham, Ahmed; Hatem, Maha*	02:20 PM
381	**Enhancing Inertial Measurement Unit Based Posture and Motion Estimation through Multi-Modal Training Using Video Posture Detection Models**	*Abdalla, Misk*; Ashour, Mohamed*	02:40 PM
382	**Deep Learning for Microscopic Image Segmentation in Multiple Myeloma: A Comparative Study**	*Alatawi, Ashraf*; Mohammed, Ammar*	03:00 PM
408	**Predicting Glaucoma Visual Field Progression from Fundus Images with a Weighted Ensemble Method**	*Fouda, Mohammed*; Mohammed, Ammar*	03:20 PM
418	**Financial Risks Prediction Using Multiple Machine Learning And Deep Learning Techniques**	*Awad, Mohamed*; Hamada, Badr; Solayman, Marwa; Hassan, Mai*	03:40 PM

Session 9 - AI

Session 9

ROOM:	C111	**TOPIC:**	AI
START:	Jul 12, 2025, 02:00 PM	**END:**	Jul 12, 2025, 04:00 PM

Chair: Noha Gamal Saad

Co-Chair: Maha Hatem

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
341	Error-Guided Pose Augmentation: Enhancing Rehabilitation Exercise Assessment through Targeted Data Generation	*Sherif, Omar*; Hamdi, Ali*	02:00 PM
352	AI-Driven Clinical Decision Support for Personalized Musculoskeletal Care: A Retrieval-Augmented Generation Approach	*Tarek, Farah*; Mansour, Hesham; Wael, Shahd*	02:20 PM
362	AI Based Bootstrapping Method for Uncertainty Management in RUL Estimation of Aircraft Turbofan Engines	*Zaki, Shahd*; Mosaad, Reem; Elattar, Hatem*	02:40 PM
367	Comprehensive Benchmarking of YOLO Variants for Cashew Plant Disease Detection using Drone Imagery	*nafady, Menna; elfeky, Salma *; hamdi, Ali*	03:00 PM
370	AI-Driven Smart Compound System for Secure Access and Intelligent Parking Management	*Elsaid, Shady*; kishk, kenzy; Labib, Mohamed*	03:20 PM

Session 10 - Networks

Session 10

ROOM: C116	**TOPIC:** Networks
START: Jul 12, 2025, 02:00 PM	**END:** Jul 12, 2025, 04:00 PM

Chair: Nermin Hamza

Co-Chair: Amr elmaghraby

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
38	**A Comprehensive Intelligent System for ClassifyingDysarthric-speech Using Ai Technics**	*Mamdouh, Nour; Mohamed, Shahd; Elsersy, Wael**	**02:00 PM**
39	**Find my phish: phishing detection browser extention**	*Khaled, Sandy*; Elsersy, Wael*	**02:20 PM**
58	**Multimodal AI-Driven Assessment of Infrastructure Resilience to Extreme Weather via Internet Connectivity and Nighttime Light Data**	*Abdelmohsen, SaifEldeen*; Megahed, Muhammed; Atwan, Islam; GamalEldin, Noha*	**02:40 PM**
186	**Reducing Mean Time To Respond Using Large Language Model-Driven Incident Response with the Aid of Reactively Retrieved Threat Intelligence**	*Abdulghany, Youssef; Zewail, Ayad*; Samy, Moataz*	**03:00 PM**
348	**An Agentic Flow for Finite State Machine Extraction using Prompt Chaining**	*Wael, Fares; Maklad, Youssef*; Hamdi, Ali; Elsersy, Wael*	**03:20 PM**

Session 11 - AI

Session 11

ROOM:	C111	**TOPIC:**	AI
START:	Jul 13, 2025, 11:30 AM	**END:**	Jul 13, 2025, 01:30 PM

Chair: Mohamed Tahrwat

Co-Chair: Nermin Kamal

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
13	Downlink Throughput Prediction in cellular Networks using Multimodal Deep Learning Model	*Tharwat, Mohamed*; Fahmy, Yasmine; Khattab, Ahmed*	11:30 AM
50	Towards Transparent and Robust Early Diagnosis of Alzheimer's Disease: A Deep Learning and Visual Analytics Framework	*Mohamed, Soha**	11:50 AM
127	Real-Time Lip-Sync with AI-Driven Voice cloning Technology	*Tantawy, Youssef*; Hebishy, Rodaina; Mohammed, Ammar*	12:10 PM
157	Brain Stroke Prediction Using Machine Learning and Deep Learning Techniques	*Shaltout, Asem**	12:30 PM
289	Used Car Price Prediction and Classification Using Machine Learning Approaches	*Hesham, Mostafa*; Ahmed, Hisham; Labib Borham, Mohamed*	12:50 PM

Session 12 - Software Engineering

Session 12

ROOM:	C116	**TOPIC:**	Software Engineering
START:	Jul 13, 2025, 11:30 AM	**END:**	Jul 13, 2025, 01:30 PM

Chair: Eman helal

Co-Chair: Marwa Soliman

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
130	**Comparative Study on Test Case generation using Generative AI**	*Azzam, Adham*; Hany, Omar; Mansour, Hesham*	11:30 AM
137	**Comparing Transformer-Based Log Anomaly Detection With LLM Explainability In CI/CD Pipelines**	*Al-Aqrabi, Qasem*; Al-Aqrabi, Hatem; Solayman, Marwa*	11:50 AM
138	**Analyzing Test Case Prioritization approaches With Performance and Speed Trade-offs in CI Workflows**	*Hassan, Abdelrahman *; Solayman, Marwa*	12:10 PM
155	**Microservices Architecture in Fintech: A Case-Study on Scalable Loan-Processing with Classical Design Patterns**	*Elrashidy, Mahmoud*; Mansour, Hesham*	12:30 PM
177	**LLMOps-driven Robotic Process Automation (RPA) approach**	*Abdellatif, Osama*; Ayman, Ahmed*	12:50 PM
417	**Enhancing E-Learning Platforms with AI-Driven Techniques**	*Ayman, Abdelrhman**	01:10 PM

Session 13 - Bioinformatics & Health Informatics

Session 13

ROOM:	C114	**TOPIC:**	Bioinformatics & Health Informatics
START:	Jul 13, 2025, 11:30 AM	**END:**	Jul 13, 2025, 01:30 PM

Chair: Abdelaziz Ahmed

Co-Chair: Mohamed Nagy

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
98	Unreliable Annotation Detection with Similarity Graph in Cervical Cytology	*iida, Yasuhiro*; Mrazovac, Bojan; Ishigure, Yasuo; Sato, Ikuma; Niimi, Ayahiko*	11:30 AM
105	Multi-Omics-Based Subtyping of Ovarian Cancer Using Deep Learning and SVM Classification	*Hozain, Ereeny**	11:50 AM
115	ECG Stress Detection Leveraging Deep Learning Techniques	*Abdelbaki, mariem*; Hossam, Hanin; Salman, Omnia; Tamer, Rofida; Alaa, Mennatallah; Mourad, Joumana; Sherif, Sameh*	12:10 PM
317	Machine Learning-Based Assessment of Psoriasis Using Real-World Clinical Data from Egyptian Population	*Walid Abdelsalam, Farah*; Walid Mostafa, Rawan ; Tarek, Hanan; Shaker, Olfat; Saad, Mohamed*	12:30 PM
332	Chaos-Informed 1D CNNs for Gait Dynamics Classification	*Eltanani, Shadi*; V. olde Scheper, Tjeerd*	12:50 PM
393	Enhancing Sequence-Only PPI Site Predictors: Integrating Attention Modules and Imbalance-Aware Training in a CNN Platform	*Saif-Eldeen, Mohamed*; Elsamadony, Mahmoud*	01:10 PM

Session 14 - CV

Session 14

ROOM:	C112	TOPIC:	CV
START:	Jul 13, 2025, 11:30 AM	END:	Jul 13, 2025, 01:30 PM

Chair: Shaira Azzab

Co-Chair: Moataz Samy

Presentations (6)

PAPER #	TITLE	AUTHORS
60	From Artifact to Text: A Novel Deep Learning Approach for Ancient Egyptian Language Processing	El-Taher, Ahmed*; Azazy, Shahira; Mohamed, Ammar
80	Real-Time Violence Detection Across Domains: Evaluating Model Robustness in Varied Surveillance Contexts	Kotb, Mennat Allah*; Aly, Ganna; Elabd, Maryam; Khorshid, Mariam; El-Nokrashy, Ahmed; Saad, Noha
131	A Hybrid Multi-scale and Attention mechanism Approach for Pothole Image Classification: A Comparative Study	Abo-Asal, Rawan*; Montasser, Salma ; Abdelwahab, Ali ; Mohammed, Ammar ; Mahfouz , Magi
149	A Novel MRI Image Enhancement Pipeline for Alzheimer's Staging via Grad-Cam-Integrated CNN and KNN Based Patch-Level Attention	Abdulmoneim, Youssef; Saad, Mohamed*; Nassef, Tamer
274	Lesion_Detection_in_CT_Scans__A_Comparative_Study_of_Traditional__One_Two_Stages__and_Transformer_Based_Models	El Barbary, Muhamed*; Mohammed, Ammar
294	Optimized Deep Attention Model for Drone-Based Fault Detection in Solar Panels	tarek, shahd*; Hamdi, Ali Hamdi

Session 15 - NLP

Session 15

ROOM:	C117	**TOPIC:**	NLP
START:	Jul 13, 2025, 11:30 AM	**END:**	Jul 13, 2025, 01:30 PM

> **Chair:** Sherif Eletriby
>
> **Co-Chair:** Wael Gomaa

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
169	**Enhancing Legal Document Understanding and Analysis Using Retriever-Augmented Generation (RAG)**	*Abdelsabour, Mahmoud*; Gomaa, Wael*	11:30 AM
222	**Uncertainty-Based Aggregation for Enhanced Mistake Identification in Educational Dialogues**	*Hikal, Baraa*; Nasreldin, Ahmed; Gomaa, Wael; Hamdi, Ali*	11:50 AM
349	**Arabic Dialect Classification using RNNs, Transformers, and Large Language Models: A Comparative Analysis**	*Essameldin, Omar*; Osama, Ali; Gomaa, Wael; Elsersy, Wael*	12:10 PM
383	**Exploring the Power of Multimodal Fusion Strategies for Fake News Detection: A Comparative Analysis of Basic and Advanced Approaches**	*Saad, Noha*; Gomaa, Wael; wassif, khalid ; Bayomi, Hanaa*	12:30 PM
407	**Comprehensive Benchmark: Comparing Classical, Recurrent, and Transformer-Based Models for Sentiment Analysis Across Text Length Strata**	*Alatawi, Ashraf*; Gomaa, Wael*	12:50 PM
419	**Balancing Efficiency and Accuracy: A Comparative Analysis of LSTM and RoBERTa for Explainable Hate Speech Detection on HateXplain**	*Medhat, John*; Khaled, Amr; Mohamed, Ahmed; Hassan, Wael*	01:10 PM

Session 16 - HCI

Session 16

ROOM:	C116	TOPIC:	HCI
START:	Jul 13, 2025, 02:00 PM	END:	Jul 13, 2025, 04:00 PM

Chair: Seif Eldawlatly

Co-Chair: Mohamed Hossam

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
305	Deep Learning-Based Classification of Anterior Pelvic Tilt Rehabilitation Exercises Using RGB Video and Pose Estimation	*Abdelrahim, Abdulrahman*; Ahmed, Youssef; Al-Emrany, Asmaa ; Mohamed, Mohamed; Borham, Mohamed*	02:00 PM
354	Classification of Kyphosis Rehabilitation Exercises Using MediaPipe and Hybrid CNN-RNN Architecture	*Ghareib, Abdelrahman*; Ghareib, Hamza; Al-Emrany, Asmaa; Hassan, Mai*	02:20 PM
399	Vision-Based System for Tennis Stroke and Error Classification	*Morsy, Shahd*; Atia, Ayman*	02:40 PM
404	Museum Virtual Guide with Deep Learning-Based Hybrid Recommendations for Personalized User Experiences	*Alaasar, Sohila*; Mekawey, Hosam*	03:00 PM
411	Multimodal Fusion of Wearable and Vision Data: Exploring Early and Model Fusion for Human Activity Understanding	*Hussein, Ahmed; Naeim, Saif*; Nageub, George; Zaher, Moamen; Atia, Ayman*	03:20 PM
412	Harnessing Deep Learning and CGANs for Accurate Detection of Abnormal Driver Behaviors Using Skeleton Keypoints	*Ebrahim, Mazen*; Ramadan, Enjy; Khattab, Hossam; Darwish, Farah; Atia, Ayman*	03:40 PM

Session 17 - AI

Session 17

ROOM: C111	**TOPIC:** AI
START: Jul 13, 2025, 02:00 PM	**END:** Jul 13, 2025, 04:00 PM

Chair: Amr Sabry

Co-Chair: Ali Somai

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
139	An Enhanced Filter-based approach for Feature Selection	Ammar, Mohammed*; Fekry, Shreen	02:00 PM
327	Predicting Egyptian Stock Trends: A Comparative Framework Using ML, Time Series, and Deep Learning	Elrashidy, Omnia*; Fouad, Khaled; Hussein, Ensaf	02:20 PM
375	Comparative Analysis of Ant Colony Optimization and Google OR-Tools for Solving the Open Capacitated Vehicle Routing Problem in Logistics	Abdelmohsen, Assem Omar*; Omar, Youssef; Solayman, Marwa; Mansour, Hesham	02:40 PM
398	LLaVA-Assisted Prompt Engineering for Liver X-Ray Report Analysis	makram, manal*; Mohammed, ammar	03:00 PM
403	Clustering Trajectories For Rats Movements Using Unsupervised Learning	Farouk, Farouk*	03:20 PM

Session 18 - CV

Session 18

ROOM: C112	**TOPIC:** CV
START: Jul 13, 2025, 02:00 PM	**END:** Jul 13, 2025, 04:00 PM

Chair: Samer Ibrahim

Co-Chair: Zeinab Taha

Presentations (5)

PAPER #	TITLE	AUTHORS	START TIME
53	Enhancing Planogram Compliance in Retail Stores through an Image Processing System	UCAL SARI, Irem*; Oncu, Ayse; Karabulut, Duygu BEril	02:00 PM
292	3D Brain Tumor Segmentation using U-Net: Integrating Deep Learning and Mixed Reality for Medical Imaging and Education	Khaled, Amr*; Mounir, Ahmed; Taha, Zeinab	02:20 PM
368	Integrating Channel Fusion and Channel Attention in Night Time Object Detection: An XAI Analysis.	Mitwalli, Ahmed*; Ashour, Mohamed; Amin, Nour	02:40 PM
410	Skeleton-Based Infant Activity Recognition: A Study of Sequence, Graph, and Time-Frequency Representations	Abdelsatar, Sohaila*; Beshir, May; Abd EL-Rahim, Shimaa; Zaher, Moamen; Solayman, Marwa	03:00 PM
420	LSTM-Based Deep Learning and Dual-Sensor Fusion for Monitoring Crystal Methamphetamine Withdrawal Symptoms	Kamel, Omar*; Ahmed, Ali; Atia, Ayman	03:20 PM

Session 19 - ML

Session 19

ROOM: C114	**TOPIC:** ML
START: Jul 13, 2025, 02:00 PM	**END:** Jul 13, 2025, 04:00 PM

Chair: Yehia Elhalwagy

Co-Chair: Yasmin Farouk

Presentations (6)

PAPER #	TITLE	AUTHORS	START TIME
92	Machine Learning for Used Car Price Prediction in the Egyptian Market	Elkholy, Mohamed*	02:00 PM
150	Comparative Analysis of Traditional Machine Learning and Deep Learning Techniques for Brain Tumor Identification in MRI Data	Sabry, Anas; Abo Alazm, Karim ; Saad, Mohamed*; Nassef, Tamer	02:20 PM
237	Offline Predictive Maintenance for Automotive Engines Using Machine Learning	Gadallah, Abdelellah*; Alaa, Yousef	02:40 PM
291	Automated Diagnosis of Dental Conditions in Panoramic X-Rays with Ensemble Deep Learning Models	Essam, Aly*; Gamal, Mohaned; Atia, Ayman; Hany, Steven	03:00 PM
301	AI Virtual Gym Trainer:Using deep Learning for Real-Time Exercise Guidance and Form Correction	Medhat, John*; Taha, Zeinab	03:20 PM
302	Health-Aware Path Planning Using Environmental Data and Sequential Prediction Models for Asthma Management	ayman, nada*; Hamdi, Ali ; Alaa, Shaimaa	03:40 PM

Session 20 - Online

Session 20

ROOM: C117	**TOPIC:** Online
START: Jul 13, 2025, 02:00 PM	**END:** Jul 13, 2025, 04:00 PM

Chair: Ibrahim Eldesouki

Co-Chair: Farid Ali

Presentations (7)

PAPER #	TITLE	AUTHORS	START TIME
146	Enhancing Energy Sustainability and Operational Efficiency of Ammonia Production using Machine Learning	*Salah Abuelhamd, Mohamed*; Mohammed Ammar, Ammar; Mahmoud El-Gharbawy , Muhammad*	02:00 PM
162	An Explainable AI (XAI) Approach to Assessing the Significance of Color Information in Object Detection	*Dawoud, Mohamed*; Ashour, Mohamed; Idris, Nour*	02:20 PM
281	Predicting Employee Attrition Using Machine Learning Approaches	*Meshref, Hossam**	02:40 PM
295	IP2EF: An Open-source Solution for Analyzing and Enhancing the Game Player Engagement	*Kassem, Farida; Hassan, Yomna; Aboulhassan, Amal**	03:00 PM
336	Deep Boltzmann Wavelet Neural Network to detect changing in dynamic system	*mohamed, hadeer*; Ali, Hussein; kholief, Mohamed; Aburawash, Usama; Kashief, Nermeen*	03:20 PM
345	Generating Novel Protein Sequences with Self-Supervised Learning	*Girgis, Hani**	03:40 PM
361	Deep Transfer Learning with Ensemble Models for Skin Disease Classification: A Case Study on Melanoma and Eczema	*Aldawood, Raya*; Mohammed, Ammar*	04:00 PM