

2025 12th International Conference on Information Technology (ICIT 2025)

**Amman, Jordan
27-30 May 2025**



**IEEE Catalog Number: CFP2572A-POD
ISBN: 979-8-3315-0895-1**

**Copyright © 2025 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP2572A-POD
ISBN (Print-On-Demand):	979-8-3315-0895-1
ISBN (Online):	979-8-3315-0894-4
ISSN:	2831-3380

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Contents

COPYRIGHT INFORMATION..... I

ABOUT ZUJ II

WELCOME MESSAGE III

COMMITTEESVI

Keynote Speakers.....XI

Industrial Workshops.....XV

PapersXXI

Papers

Title	Authors	Page
A Novel Deep Learning Approach for Enhanced Ischemic Brain Stroke Detection from CT Images Using Deep Feature Extraction and Optimized Feature Selection	Ahmad Abumihsan, Majdi Owda, Amani Owda, Fathi Gasir, Mobarak Abumohsen and Lampros Stergioulas	1
Advanced Deep Learning Techniques for Accurate Lung Cancer Detection and Classification	Mobarak Abumohsen, Enrique Costa-Montenegro, Silvia García-Méndez, Amani Owda and Majdi Owda	7
Real-Time Detection and Analysis of Facial Movement Disorders Using MediaPipe and OpenCV: A Streamlit-Based Framework	Noura Abulail, Amani Owda and Majdi Owda	13
Enhancing Digital Investigation: The Role of Generative AI(ChatGPT) in Evidence Identification and Analysis in Digital Forensic	Marah Hawa, Majdi Owda and Amani Owda	19
Customer Segmentation for Targeted Campaigns Using RFM Analysis and K-Means Clustering	Roa Baddad, Amani Owda and Majdi Owda	27
Agentic AI for Healthcare: Solutions to Intelligent Patient Care	Shadi Alzubi, Muder Almiani and Yaser Jararweh	33

Papers

Title	Authors	Page
OTuHunt: An Aggregated Threat Hunting & Intelligence Platform for OT/ICS Environment and MSSP Services	Lena Alqahtani, Nouf Alamoudi, Fatimah Alaliwat, Manar Alzahrani, Shaima Hakami, Abdulrahman Alharby and Nawaf Alharbi	39
Detection of Adversarial Evasion Attack on AI Model Running on IoT Devices	Lena Alqahtani, Nouf Alamoudi, Fatimah Alaliwat, Manar Alzahrani, Shaima Hakami and Abdulrahman Alharby	47
Holy Quran Reciter Classification and Recognition Using Convolution Neural Network: A Deep Learning Approach	Jawad Alkhateeb and Rashiq Marie	55
Deep Learning-Based Automated Diagnosis and Classification of Rice Leaf Diseases Using CNN Architectures for Sustainable Agriculture	Santhosh C S, Sharath Kumar R, Nisha P, Narendra Khatri, Harish Sharma and Bablu Kumar Singh	61
STAV360: A Dataset for Subjective Tile-based Assessment of 360° Videos	Moatasim Mahmoud, Stamatia Rizou, Andreas Panayides, Pavlos Lazaridis, George Karagiannidis, Nikolaos Kantartzis and Zaharias Zaharis	67
Utilizing Deep Learning, Ensemble Learning, and Transfer Learning for Enhancing Security in Internet of Things Networks through Intrusion Detection Systems	Yahya Alhaj Maz, Mohammed Anbar, Selvakumar Manickam and Mosleh M. Abualhaj	73
Evaluating Administrative Accountability for Artificial Intelligence Application Errors in Jordan: Legal and Ethical Implications	Mohmmad Almajali, Ala' Masarweh and Ihab Rayyan	77
Towards Robust SEA Detection: Leveraging Model Diversity and Randomization Against Adversarial Attacks	Insaf Kraidia and Samir Brahim Belhaouari	84

Papers

Title	Authors	Page
Medical Image Analysis for Brain Tumor Classification Using CNN Architecture	Alaa Sheta, Walaa H. Elashmawi, Abdel Karim Baareh, Peter Rausch and Emad S. Othman	91
A Survey of Supervised, Unsupervised, and Ensemble Learning Approaches for DDoS Detection in SDN	Abdinasir Hirsi, Jafar Ismail Mohamed, Abubakar Abdi Warsame, Abdirizak Abdullahi Khalif, Lukman Audah, Adeb Salh, Salman Ahmed, Diani Galih Saputri and Abdiaziz Mohamed Abdirahman	99
Control of Chaos in Memristives Systems Using Fractional Discrete Calculus	Iqbal Batiha, Louiza Diabi, Adel Ouannas, Iqbal H. Jebriil, Jamal Oudetallah and Shaher Momani	105
Incommensurate Fractional Computer Virus System: Control and Simulation	Iqbal Jebriil, Khadidja Dibi, Imane Zoua, Adel Ouannas, Amina-Aicha Khennaoui and Iqbal M. Batiha	109
Image Encryption Using Circular-Shifting, Permutation Expansions and XOR	Ayman Abdalla, Qasem Makki and Ahmad Mazhar	114
Synchronization of Fractional Discrete Memristives Models	Iqbal Jebriil, Louiza Diabi, Adel Ouannas, Iqbal Batiha, Wasim Audeh and Shaher Momani	120
Multi-crackNet: A Deep Learning Framework for Multi-Class Crack Detection in Concrete Structures	Abdulrahman Alkannad, Ahmad Al Smadi and Wael Alzyadat	124
A Novel Approach for Solving Space Fractional Heat Equations with Variable Coefficients Using the Crank-Nicolson Method	Reem Edwan	130
Evaluating Machine Learning Classifiers for Detecting Distributed Denial of Service Attacks	Omar Almomani, Adeeb Alsaaidah, Mohammed Amin Almaiah, Abdullah	134

Papers

Title	Authors	Page
	Alzaqebah, Mosleh M. Abualhaj and Wael Jumah Alzyadat	
Securing 5G Critical Interfaces: A Zero Trust Approach for Next-Generation Network Resilience	Sibaram Prasad Panda	141
A Two-Stage Hierarchical Skin Lesion Classification Using Transfer Learning	Ghaith Al-Shawabkeh, Mohammad Abdalaziz and Amjed Al-Mousa	147
Real-Time Detection and Mitigation of GPS Spoofing in UAV Systems	Rajanbir Singh Tucker, Muhammad Nadeem and Shahbaz Pervez	154
A Study of Security Threats in IoT Network Layer using MQTT and TLS	Muhammad Nadeem, Rashid Mustafa, Pierre E. Abi-Char and Rajanbir Singh Tucker	161
Image Similarity Assessment Using Node Degree Distribution	Shanzay Alam, Misha Fakhar, Fatima Khalid, Saeed Mian Qaisar and Usman Haider	167
Fractional Bernoulli Equation with Ujlayan-Dixit operator	Amer Dababneh, Hamzah Al-Khawaldeh, Iqbal Jebriil, Iqbal Batiha and Shaher Momani	173
Distribution of Renyi Entropy from Nakagami Distribution Sample	Rama Rasheed, Azeza Al Abdallah and Andaleeb M.Abu Kamel	177
Hybrid Deep Learning Framework for Estimating the Occurrence Rate of the Inverse Exponential Process: A Comparative Analysis of LSTM, ANN, and Traditional Methods	Adel S. Hussain, Zedan Z. Mashikhin, Naaman Omar Yaseen, Ma'Mon Abu Hammad, Emad Az-Zo'Bi and Mohammad A. Tashtoush	181
Parameters Estimation in a Non-Homogeneous Poisson Process with Fuzzy Data through a Modified Fuzzy	Muthanna Subhi Sulaiman, Rana Noaman Abbas, Adel Sufyan, Ma'Mon Abu Hammad, Emad Az-Zo'Bi and Mohammad A. Tashtoush	188

Papers

Title	Authors	Page
Maximum Likelihood Approach Using Artificial Intelligence		
Penetration Testing of a Unified Merchant Portal: Systemic Vulnerabilities and Compliance-Centric Mitigation	Ahmad Al-Omari	196
A Comparative Study of Machine Learning Algorithms for Credit Card Fraud Detection	Mohammad Aburass, Rehab Aburass and Marwa Hamza	201
Leveraging Feature Selection and Explainable AI for Effective Autism Screening	Qusai Shambour, Mohd Khaled Shambour, Yousef Alraba'Nah and Mosleh Abualhaj	207
A Comprehensive Survey on Intrusion Detection Systems in IoT: Challenges and Future Directions	Ala' M. Al-Zoubi, Katrina Sundus and Tarek Kanan	213
Analytical Solution of a Modified KdV Equation via Atomic Decomposition	Hamza Alzaareer and Waseem Alshanti	219
Cloud Services Cyberattacks: Most Infectious Viruses and Method of Infections	Khaled M. Musa and Mohammad Abdallah	223
A Novel Genetic Algorithm-Optimized Selective Encryption for Enhanced Privacy in Medical Imaging	Rahmeh Ibrahim and Ashraf Qaddomi	228
The impact of instance reduction on classification process in intrusion detection system	Safaa Yousef Saleh Al-Adwan, Salwani Abdullah, Mohammed Alweshah and Wandeeep Kaur	236
Optimizing Multimodal Feature Alignment for Enhanced Text-to-Video Retrieval Performance	Nasim Matar, Firas Alnaimat, Ahmad al-Qerem, Shadi Nashwan and Essam Jibreen	242

Papers

Title	Authors	Page
Robustness of Question Answering Systems in the Biomedical Domain: a study of the BioASQ dataset	Andrew Reeves and Hang Dong	247
Technical and Ethical Strategies to Prevent Machine Learning Models from Exploiting Personally Identifiable Information (PII)	Rand Albustanji, Ahmad Alkhatib and Ameen Shaheen	253
Information Dissemination Modeling for Connected Autonomous Vehicles (CAVs) at Urban Intersections Using Percolation Approach	Ala Alobeidyeen	258
Geometric Hyperplane Intersection Solver: A Matrix-Inversion-Free Framework with Quantum-Neuroevolutionary Enhancements	Tawfiq Jallad and Mamon Abu Hammad	263
Exploring SBC with Kinect And machine Learning for Indoor Mobile Robot Design and Monitoring	Mohamed Fezari, Ali Al Dahoud, Mohamed Tahar Gossa Tahar Gossa, Mohamed Akram Bensaïd and Ahmad Al-Dahoud	272
AI for Software Project Management: Predicting Delivery Times & Resource Allocation	Ahmad Nabot, Issam Jebreen, Shadi Nashwan and Ahmad Al-Qerem	277
AI-Driven Feature Selection for Enhanced Heart Disease Prediction	Ameera Jaradat, Salem Alhatamleh, Mohammad Amin and Hatem Malkawi	285
AI and Blockchain: Transforming Data Security in Higher Education Institutions	Dr Virendra Gawande	290
Addressing Class Imbalance in Arabic Medical Questions using Ensembles and SMOTE	Bushra Smadi, Bassam Hammo and Hossam Faris	297

Papers

Title	Authors	Page
Detecting double-spending attack in Blockchain Networks using k-nearest neighbor algorithm	Farhan Abdel Fattah, Khalid Farhan and Seraj Fayyad	304
AN ANALYTICAL APPROACH TO FIXED POINT RESULTS FOR SEHGAL GUSEMAN CONTRACTION IN EXTENDED b-METRIC SPACES	Haitham Qawaqneh and Habes Alsamir	309
Harnessing Quantum Gradient Machine Learning to Decode Subtelomeric Methylation in Telomere Maintenance Pathways	Don Rooson, Rubayat Khan, Saif Nirzhor, Avik Mahata and Hasiba Khan	312
Development of Industrial Machine Temperature Monitoring System for Semiconductor Company A	Mark Angelo Mercado, Juliet Niega, Oliver Medina, Jovette Pecayo, John Ceazar Bello and John Maverick Detera	317
Service Diversification and Employment Opportunities in a Rapidly Evolving Sector: Jordan as a Case Study	Jalal Kiswani and Mohammad Abdallah	324
Development of an Examination Checker using OMR for Multiple Choice Test Evaluator for National University Philippines	Oliver Medina, Juliet Niega, Mark Angelo Mercado, Arsenio Arellano, Toni May Sabater and John Rejano	329
AI-Based Program Slicing: Techniques, Tools, and Comparative Analysis	Mohammad Abdallah, Amir Ngah, Anas Al-Rahamneh and Daniel Staegemann	334
Characterization of some results of surfaces and their properties in the Euclidean 3-space	Hassan Al-Zoubi, Mais Jaradat, Mohammad Al-Kafaween, Hamza Hzayen and Bayan Tayem	339
SAHDA: A Semantic-Aware Hybrid Approach for Arabic Spell Checking with Domain Adaptation	Mossab Ibrahim, Pablo Gervás and Gonzalo Mendez	343

Papers

Title	Authors	Page
Improving the Classification of Arabic Tweet Sentiment Using Word Embedding Models	Ghassan Kanaan, Mariam Dabaeen, Raed K. Kanaan, Ghazi Kanaan, Salahiddin Altahat and Ibrahim Atoum	349
Arabic Email Spam Detection Using Machine Learning and Deep Learning: A Comparative Study	Ghassan Kanaan, Motaz Zghoul, Ghazi Kanaan, Ala' Al-Zoubi and Tarek Kanaan	353
Modern Architectural Patterns for Scalable Learning Management Systems: Integrating Microservices, Client-Server, and Database Management	Ceselia Alyawanseh, Renad Alwahsh and Ameen Shaheen	358
AI in Employee Performance Management: Process Mining for Enhancing Productivity and Growth	Maqsood Mahmood, Ghayur Ahmad and Zahra Afridi	363
Energy Efficiency Optimization in the IoT using Whale Optimization Algorithm and Simulated Annealing	Ameen Shaheen, Ala'A Al-Shaikh, Abdallah Damra, Mohammad Al-Mousa, Sami Askar and Suha Afaneh	369
Schnorr-Based Authentication Framework for Secure Vehicle to Vehicle Communication	Adi El-Dalahmeh and Eman Abu Maria	375
Tree-Based Machine Learning Models for Phishing Email Detection	Sunshine Casido, Jaydee Ballaho and Edwin Arip	381
Predicting Breast Cancer Recurrence Using Machine Learning Models: A Comparative Study	Katrina Sundus, Ala' Al-Zoubi, Eyad Hailat and Bassam Hammo	387
Agile Project Management Optimization with AI technology: Challenges and Impact	Marwa Hamza, Rehab Aburass, Mohammad Aburass and Tamara Jber	393
Evaluating the Effectiveness of Cybersecurity Training: Key Elements, Best Strategies, and Future Prospects	Omran Salem, Marwa Hamza and Akram Zeki	398

Papers

Title	Authors	Page
IoT Medical Network Security System Based Explainable AI Model	Abdallah Altrad, Wael Alnaimat, Saed Mustafa, Malik Jawarneh, Majd Mohammad Alhawamdeh and Ahmad Abu-Al-Aish	404
A Transformer-Based Deep Learning Model for Arabic Image Captioning	Israa Albadarneh, Prof.Bassam Hammo and Prof.Omar Alkadi	410
Beyond One-Size-Fits-All: Comparing and Selecting Regression Metrics for Robust Model Assessment	Yousef Jaradat, Mohammad Alia, Mohammad Masoud, Ahmad Manasrah, Ismael Jannoud and Omar Alheyasat	416
IoT Cybersecurity Policies: A Comparative Analysis	Gana Sawalhi, Bisan Nasser and Mais Khatib	423
Predicting DC Motor Speed Using Acoustic Analysis: A Comparison of Neural Networks and Convolutional Neural Networks	Mohamamd Masoud, Nabeel Abu Shaban and Ali Mahmoud	428
Evaluating the Economic Impact of On-Grid and Off-Grid Solar PV Systems in Homes	Ahmad Manasrah, Nezar Qudah, Yousef Jaradat, Mohammad Masoud and Mohammed Jaradat	434
A Distributed Brute-Force Attack and Misleading Countermeasure for Securing ModbusTCP Implementations in PLCs	Mohammd Abdul Jawad, Mohammad Z. Masoud, Álvaro Álesanco and José García	439
Pneumonia Classification from X-ray Images with Convolutional Neural Network	Nadia Abdulsattar	444
Comparison of ML Methods for Analyzing Scaffolding Behavior: A Case Study on Safety and Multimodal Results	Mohamad Al Omari, Eslahi Mojtaba, Amine Ammar, Rani El Meouche, Laure Ducoulombier and Laurent Guillaumat	451

Papers

Title	Authors	Page
Impact of Aboodh Power Series Algorithm for Integral Equations	Adnan Hnaif, Ahmad Qazza, Hamed Fawareh, Faid Fawareh, Rania Saadeh and Belal Zaqibeh	458
A Dataset of Media Articles on ChatGPT	Ahmad Abdel-Hafez and Areej Yousef	465
A Deep Learning Approach to Predict User Experience Writing Faults in Mobile Applications' Interfaces	Emad Shawakfa, Majd Al-Zahrawi and Rami Malkawi	471
Artificial intelligence innovations and strategic insights or a smart retail transformation	Firas Omar, Mohammad Hassan, Shadi Nashwan, Ahmad Al-Qerem and Ali Mohd Ali	477
Toward Enhancing Outdoor Mobility Assistive Technologies for People with Vision Impairment: Experts' Perspective	Abeer Malkawi and Azrina Kamaruddin	484
A Phase-Based and Student-Centric Requirements Classification Framework for Software Engineering Education in the Metaverse	Yousra Odeh and Rana Yousef	490
Conformable Fractional Derivative of a Vector Field	Waseem Alshanti, Mamon Abu Hammad, Hamza Alzaareer, Hassan Al-Zoubi and Ahmad Alshanty	495
Characteristics-Based Sampling Technique for Highly Imbalanced Large Scale Datasets	Balqees Aldabaybah and Ali Rodan	499
COMPLEX SAWI INTEGRAL TRANSFORM AND SOME APPLICATIONS	Waseem Al Mashaelh, Alaa Al-Zboon, Rania Saadeh, Alaa Al-Wadi, Ahmad Qazza and Iqbal Jebril	506

Papers

Title	Authors	Page
Dublejli: AI-Based Adaptive and Multi-Lingual Video Dubbing System	Mohammad Abdel-Majeed, Ahmad Maraqa, Moath Abu-Mahmoud, Othman Milad and Shorouq Alawawdeh	511
Evaluating the Performance of Three IHS-based Pansharpening Techniques	Ouahab Abdelwhab and Hautia Cherifa	517
Optimizing Urban Logistics with Autonomous Delivery Robots	Irene Izco, Adrian Serrano-Hernandez and Javier Faulin Fajardo	522
Towards Using Ontology-Based Systems for Explainable Medical Diagnosis in Nutrition Domain	Duha Al-Darras, Bashar Al-Shboul and Nadim Obeid	528
Enhancing Security and Reliability in IoT Smart Homes via Advanced Engineering Testing Methodologies	Tarek Kanaan, Ceselia Alyawanseh, Ghassan Kanaan and Nesreen Hamad	534
Machine Learning Approach to Detect Black-Hole Attack over MANETs	Anas Ali Akasasbeh	540
Smartphone Communication Strategies for Legacy Industrial Systems: A Study of ModbusTCP and Local Server Solutions	Mohamamd Masoud, Rashed Alsakarnah, Yousef Jaradat, Ismael Jannoud and Mais Alhawawsheh	546
Hybrid Crime Data-driven Route Optimization System for Safer Urban Navigation	Sukruthi Sanampudi, Chandra Prabha, Sampann Raheja, Sudeepa Roy and Raghavendra G. A.	552
Celebrity Hairstyle Recommendation System with Hairstyle Transfer	Longvu Pham, Vanha Tran and Truongminh Ngo	558
Fuzzy control of processes with long transportation delay – A comparative study	Hisham Hussein and Zaid Al Muala	565

Papers

Title	Authors	Page
Arabic News Text Summarization: An Extractive Technique	Iyas Qaddara, Enas Naffar, Abdallah Hyassat, Yousef Alraban'Ah, Amneh Kenana, Mosleh Abualhaj and Rania Alzubaidi	571
AzureIQ-RAG: Hybrid RAG System for Automated Information Retrieval and Semantic Query Answering Using Azure AI	Ishtiaque Mahmood, Mahammad Mastan, Zunysha Naveed, Hamza Iftikhar, Wakeel Ahmad and Syed M. Adnan	577
Evaluating the Impact of Dataset Size on the Accuracy of Arabic Software Requirements Classification Using AraBERT	Reem Amro, Ahmad Althunibat and Bilal Hawashin	584
GenoCGC: A Hybrid CNN and Graph-based Transformer Model for Genomic Sequence Classification	Anas Abu-Doleh	590
The Synergy of Cognitive Cities and Open Data in Advancing Sustainable Urban Mobility: A Case Study of Pamplona, Spain	Anas Al-Rahamneh and José Javier Astrain	596
The Role of 360-Degree Photos in Enhancing User Experience and Site Documentation on Google Maps	Mousa Salah, Mohammad Abdallah, Mustafa Al Rifaae, Basem Alokush and Khalid Mohammad Jaber	602
Knowledge, Attitude, and Practice Toward AI Use Among Health Profession Students in a Malaysian Public University	Qasem Abdallah, Hussam Mizher, Anis Faeza Faisal, Syahrir Zaini and Mohammad Abdallah	609
The Degree of Awareness of Engineering, Science And Mathematics Teachers of The Importance of Using IoT Technology In The Educational	Hamzeh Alassaf, Fadi Bani Ahmad and Haitham Qawaqneh	615

Papers

Title	Authors	Page
Temperature Forecasting for High-Temperature Data Centers: Enhancing Energy Efficiency Through Predictive Modeling	Safaa Hriez and Mohammad Hmidan	620
The Role of Large Language Models in Personalized Obesity Management: Opportunities and Challenges	Qasem M. Abdallah, Farah Al-Daghistani, Hussam Mizher, Mohammad Abdallah and Asad A. Abukhalil	626
The Impact of AI on Women's Roles in the Workplace: A Legal Gender Perspective	Laila Barqawi and Sewar Al-Rashdan	631
ChatGPT Vs. DeepSeek: A Comparative Analysis of AI Models for Enhancing Virtual Reality Experiences2	Khalid Mohammad Jaber, Mousa Salah, Mustafa Al Rifae, Naji Alqbailat, Bassem Issa and Ashour Abuelzeet	635
Machine Learning Model for Fault Prediction in Object-Oriented Systems	Mohammed Lafi, Khalid Farhan and Ahmad Abusukhon	644
Securing Smart Supply Chains with Adaptive AI Agents: A Virtual Simulation Framework	Haidar Jabbar and Samir Al-Janabi	647
Enhancing Project Selection Process Via Machine Learning	Yasmin Alhowail, Meshaal Alqahtani and Atiq Siddiqui	653
Process Duration Modeling and Concept Drift Detection using Phase-Type Distributions	Dongwei Wang, Sally McClean, Ian McChesney and Zeeshan Tariq	659
Integrating IT Infrastructure Metrics into Business Process Mining: A Telecommunications Industry Case Study	Zhi Chen, Sally McClean, Zeeshan Tariq, Nektarios Georgalas and Adeshola Adefila	665

Papers

Title	Authors	Page
Enhancing Process Mining on Sparse Event Logs: A Simulation-Driven Academic Case Study	Towfeeq Fairouz, Aleeha Iftikhar, Zeeshan Tariq, Sally McClean and Ian McChesney	671
Analyzing the Impact of COVID-19 on Gas Demand Markets: A Process Analytics Perspective	Syed Arshad Raza, Atiq W. Siddiqui and Zeeshan Tariq	677
BalancedCL: A Balanced Contrastive Learning Framework for Process Mining with Multi-Head	Bilal Ahmed Lodhi, Zeeshan Tariq and Hanif Ullah	683
Scalable IoT Security: Machine Learning-Based Threat Identification Using Crawler-Collected Data	Layla Albdour and Ahmad Sharieh	689
A New Analytical Approach to Fractional Calculus via Mittag-Leffler Functions and the complex Sawi Transform	Amjed Zraiqat, Alaa Al-Wadi, Rania Saadeh, Alaa Al-Zboon, Iqbal Jebiril and Ahmad Qazza	697
A Heuristic-Based Approach for Classifying Functional and Non-functional Arabic Security Requirements	Baraa Khamayseh, Nabil Arman and Faisal Khamayseh	702