



The  
British University  
in Dubai



IEEE  
Umatid Araa-Emirsties Section

# ICCR-2025

## 3rd International Conference on Cyber Resilience

📅 July 3rd - 4th, 2025 | Dubai, UAE



**C2PS**  
CENTER FOR CYBER-PHYSICAL SYSTEMS



UNIVERSITI  
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## Day 2: Friday, 4th July 2025

### Online Sessions, 8:00 AM, Dubai Time

Session No.	IDs Range	Submissions IDs																										Session link
Session 1 Dr. Munir	1-109	1	18	56	59	65	69	70	71	72	78	79	83	84	85	86	88	89	91	93	100	102	104	105	107	108	109	<a href="#">Click here</a>
Session 2 Dr. Jamshed	110-238	110	113	116	117	120	121	122	127	132	133	134	137	138	139	140	141	142	146	148	150	153	154	186	202	219	238	<a href="#">Click here</a>
Session 3 Dr. Iftikhar	249-477	249	252	300	311	312	327	333	359	362	451	456	459	463	465	466	467	468	469	470	471	472	473	474	475	476	477	<a href="#">Click here</a>
Session 4 Dr. Fahad	478-585	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	514	515	563	564	566	583	584	585	<a href="#">Click here</a>
Session 5 Dr. Kashaf	586-612	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	608	609	610	611	612	<a href="#">Click here</a>
Session 6 Dr. Mohammed	614-654	614	616	617	618	619	620	621	622	624	625	626	627	628	630	631	632	634	635	636	637	638	639	641	643	646	654	<a href="#">Click here</a>
Session 7 Dr. Azhaar	662-792	662	664	668	678	686	690	691	692	693	694	697	699	700	701	703	704	711	720	737	774	777	781	784	786	789	792	<a href="#">Click here</a>
Session 8 Dr. Saad	794-823	794	795	797	798	799	801	802	803	804	805	806	807	808	809	812	813	814	815	816	817	818	819	822	823			<a href="#">Click here</a>

## List of papers of the 2nd Day (Friday, 4th July 2025):

Session No.	IDs Range
1	Decentralized Finance (DeFi) Risk Management Using Blockchain and AI
18	The Evolution of Classroom Dynamics in the Age of AI and IOT
56	Exploring Secure Login Alternatives For Online Shopping Platforms
59	AI-based video retrieval: a literature review
65	Simulation Evaluation of LoRa Performance in Medical Urgent Cases
69	An ensemble approach to enhance accuracy and robustness of persistent malware detection in- vehicle infotainment system
70	A Secure Cloud Orchestration Layer for Scalable and Efficient Teleoperation
71	Application of Blockchain for Registering and Safeguarding Real Estate Property Rights
72	Challenges of Artificial Intelligence in Tax Administrations and its Impact on Government Revenues
78	The Role of Deep Learning in Modern Malware Detection:A Comparative Study of Modern Approaches
79	Enhancing Cyber Resilience in Critical Infrastructure: The Role of AI in Strengthening the Three-Pillar Structure of SOC, CERT, and ISAC
83	Enhancing Keystroke Dynamics Authentication using Machine Learning Based Approach
84	A survey on Control Plane Security Approaches in Software Defined Networks
85	A Predictive Framework for APT Detection in Cyber-Physical Systems Using Attack Graphs and Exploitability Metrics
86	Neuromorphic Cryptography: Brain-Inspired Secure Encoding for Embedded Systems
88	Securing Saudi Arabian Government E-Service Najiz Portal (Ministry of Justice) from Cyber Threats Using AI
89	A Lightweight Framework using ASCON and HECC for Secure and Fast Ransomware-Resilient IoT Drug Supply Chains
91	Cyber Cross-Lingual Sentiment Analysis Model Based On Deep Learning Methods
93	Real-Time Brain State Reconstruction and Future Brain State Prediction
100	A Comparative Evaluation of Traditional and Deep Learning Models for Speaker Recognition in Assistive Systems for DHH Children
102	Strengthening IoV Security with Blockchain and TESLA: A Novel Authentication Framework
104	Performance Comparison and Optimization of Machine Learning Algorithms in Vehicle Rollover Accident Prediction
105	Application of Advanced Data Analysis in The Optimization of Human-Machine Interaction Interface in Medical Bed
107	In-depth Integration of Control Systems and Automation Technologies in Digital Factories
108	Mechanical Arm Joint Motion Optimization Study Using Neural Network PID Controller for Advanced Data-Driven Engineering Applications
109	Joint Research on Partial Differential Equation Solving and Computer Simulation Technology In Electromagnetic Field Numerical Simulation
110	Application of multi-source heterogeneous data fusion in comprehensive evaluation of low-carbon energy system
113	Application of Multimodal Attention Mechanism in The Evaluation of Graphic Semantic Similarity

116	Research on the Application and Influence of Artificial Intelligence in Digital Printing Technology : and Discuss the Sustainable Development Ideas of Digital Printing Technology
117	Research on Joint Scheduling and Joint Scheduling of Distributed Power Generation and Energy Storage Based on Hybrid Integer Linear Programming and Deep Learning
120	Construction And Evaluation Of Interpretable Machine Learning Model in Breast Tumor Metastasis Prediction
121	Application of Data-Driven Simulation Technology in the Software Verification of Medical Devices
122	Research on Deep Learning Method of Multimodal Data Fusion in Flue-Cured Tobacco Leaf Quality Grading
127	AI-Assisted Code Review and Defect Prediction Research in Software Engineering
132	The Construction of Copyright Norms for Artificial Intelligence Generated Content Training Data
133	Public Policy Formulation for Tourism and Leisure Industry Based on Big Data and Artificial Intelligence Technology
134	Application Of Advanced Data Analysis In Government Tourism Marketing Activities: Strategy Optimization and Effect Evaluation
137	Strategies for Using Artificial Intelligence to Enhance the Effectiveness of Business Analytics in Business Administration
138	AI-Assisted Supply Chain Risk Assessment and Public Crisis Management
139	AI-Aided New Media Art Installation Design: The Innovative Practice of Combining the Internet of Things and Machine Learning Technology
140	Intelligent Reconstruction of Animation Narrative: Narrative Optimization Based on Machine Learning, Existentialism and Audience Feedback
141	An Ensemble Framework for Video Authentication Using File Signatures, Metadata Analysis, and Deep Learning-Based Quantization
142	Examining the Factors Influencing Student Choice to Study: A Review of Mobility Trends in Higher Education
146	Research on Investment Portfolio Risk Prediction Model Combining Cvar and Deep Learning
148	Analyzing the Effectiveness of Backpropagation and Generative Models for Intrusion Detection in Network Security
150	Investigating the Impact of Interactive Multimodal Learning Strategy to Improve Language Teaching
153	Human E-Commerce Protection Module Using Fuzzy-Set Qualitative Comparative Analysis (fsQCA)
154	Cybersecurity Challenges and Strategic Defenses in FinTech: A Review of Emerging Threats and Mitigation Frameworks
186	TOWARDS TRANSPARENT INTRUSION DETECTION: THE ROLE OF EXPLAINABLE AI
202	Machine Learning Prediction Model in Preschool Education: Predicting Children's Future Learning Performance and Interest Trends
219	DEVELOPING A PREDICTIVE MODEL FOR VARICOSE VEIN RECURRENCE POST-CYANOACRYLATE GLUE SURGERY USING MACHINE LEARNING
238	Understanding Students' Behavioral Intention to Use AI-Powered E-Learning Platforms Based on the Theory of Planned Behavior
249	Engineering a Next-Generation AI Controlled Thorium Molten Salt Reactor: A Compact and Clean Energy Solution
252	Towards Robust Threat Detection in 6G IIoT: A Comparative Performance Analysis of Deep Learning Models
300	Applications of computer vision for diagnosing liver diseases
311	Hybridization of Whale and Elephant Herding Optimization Algorithms for Enhanced White-Box Testing in Software Engineering
312	The Influence of Internet of Things (IoT) and Big Data Technology on Sustainability in China's Chemical Sector under Evolving Energy Policies
327	Optimizing Asynchronous Communication Flows in Microservices Using Event-Driven Architecture
333	Secure Data Sharing Policies Via API Platform
359	AI-Powered Detection of Microbial Threats in Digital Health Systems: A Cybersecurity Perspective
362	The Role of Generative Artificial Intelligence in Advancing Multilingual Intelligent Support Systems
451	TOWARDS ENSURING THE AUTHENTICITY AND PRESERVATION OF THE DIGITAL QUR'AN: CONVERGENCE OF STAKEHOLDERS, TECHNOLOGY AND GOVERNANCE
456	Enhancing FinTech Resilience Using Smart Analytics for Safer Mobile and Digital Transactions
459	Biometric Authentication Methods for Strengthening Access Control in Wallets and Digital Finance Applications

463	Enhancing Online Banking Security Using CNN-Based Biometric Authentication Techniques for Verification
465	Secure Financial Data Processing Through Homomorphic Encryption in Cloud-Based Environments
466	AI-Based Fraud Prevention Models for Securing Real-Time Financial Data Across Lending Platforms
467	Graph Neural Networks for Money Laundering Detection in Cryptocurrency Financial Transactions
468	Detecting Financial Fraud with Random Forest and SMOTE in Transactional Data
469	LSTM-Based Anomaly Detection in Real-Time Financial Transaction Logs and Network
470	Smart Contract-Based Blockchain Framework for Securing FinTech Loan Processing Systems
471	Blockchain-Assisted Trust and Transparency in Cross-Border Digital Asset Management System
472	Advanced Encryption Protocols Ensuring Identity Privacy in Cloud-Enabled Financial Service Environments
473	Deep Autoencoder Model for Intrusion Detection in Financial Cybersecurity Monitoring Systems
474	Machine Learning Techniques Based Risk Detection in Digital Banking and Investment Channels
475	Fuzzy Logic and Decision Trees for Cyber Risk Assessment in Payments
476	Lightweight Cryptographic Techniques and MFA for Securing Mobile Wallet Financial Applications
477	Reinforcement Learning Approach to Mitigate Cyber Threats in Algorithmic Trading Platforms
478	Government Integration of Legal Instruments Facing Strategic Risks Within National E-Governance Networks
479	Energy Grid Trading Security-based Regulatory Policies Across Smart Supply Chains
480	Crime Pattern Statistics assisted Judicial Response Mechanisms in Digital Law Enforcement Models
481	Quantum-Safe Algorithms with Future-Proofing Cryptographic Security in Evolving Financial Technology Infrastructures
482	FinTech Risk Assessment Leveraging Compliance Frameworks With Probabilistic Modeling Approaches
483	Gamified Cybersecurity Training Using AI-Driven Learning Analytics in UK STEM Programs
484	Decentralized Finance Platforms for Promoting Secure Peer-to-Peer Lending Through Trustless Smart Contracts
485	Blockchain-Powered Secure Health Data Exchange For Enhancing Patient Privacy And Interoperability
486	Global Data Governance for Enhancing Compliance and Ethics Across Intelligent Financial Service Networks
487	Regulatory Frameworks Based International Standards for Secure FinTech and Payment Operations
488	A Hybrid Deep Learning Approach for Accurate Detection and Classification of Skin Cancer Using Dermoscopic Images
489	Enhancing Healthcare Cybersecurity: A Novel Homomorphic Encryption Framework for Cloud-Based Medical Records
490	Patient Record Protection Protocols for Confidentiality Within Intelligent Health Information Frameworks
491	Wearable Technology for Safeguarding Real-Time Biometrics During Connected Clinical Care Environments
492	Telehealth Integrity Assurance Strategies for Confidential Virtual Consultations Across Medical Platforms
493	Artificial Intelligence-Based Threat Monitoring in Resilient Medical Diagnosis Communication Networks
494	Political Regimes based Critical Infrastructure Strategies Across International Digital Sovereignty Frameworks
495	Cross-Border Digital Operations for Enforceable Legislative Sovereignty Mechanisms
514	Employing Cutting-Edge Deep Learning and Object Recognition Models for Optimizing Logistics Storage
515	Productivity Enhancement Using Generative AI in The Public Sector
563	Mitigating Distributed Denial of Service Attacks on Virtual Private Servers Using Ryu Controller
564	Design of an IoT-Based Tuna Detection Prototype Using Ultrasonic-Triggered Underwater Imaging
566	Cloud Enabled Hybrid Machine Learning IoMT Model for Real Time Anxiety Disorder Assessment Using GAD-7, PHQ-9, and UCLA-8 Psychological Scales



583	Optimizing Neural Architectures for Accurate Diagnosis of Breast Cancer from Morphological Features
584	Behavioural Analysis of AI-Generated Phishing Emails Using Generative Model
585	Electronic Records Management in Cloud Computing: Challenges, Solutions, Emerging Trends and Future Perspectives
586	A Technical Review of FROST Threshold Signatures: Variants, Extensions, Security, and RFC9591
587	HIKE: A Mobile-Based Tracking System to Enhance Hiker Safety
588	LBP and Brightnesses-Based Image Authenticity Verification For Trusted Digital Environments
589	CCTV Data Recovery by Using Fast Forward Motion Picture Experts Group (FFMPEG
590	Establishing common information security language in job descriptio
591	Noisy Iris Segmentation Using Modified Circular Hough Transform (MCHT
592	From Entertainment to Extremism: Investigating the Impact of TikTok videos Addiction on Adolescent Thought Patterns and Intellectual extremism
593	NAMED DATA NETWORKING: AN ADAPTIVE DISASTER-RESILIENT NETWORK PERFORMANCE EVALUATION BASED ON SIMULATIO
594	Research Trends on DDoS Detection in Software-Defined Networking: A Bibliometric Analysis
595	Optimizing Stroke Prediction in Healthcare with Neural Machine Learning Algorithms
596	Adaptive Lightweight Security for TinyML Driven Unmanned Aerial Vehicles in Smart Cities
597	Lightweight Fingerprint Authentication with Template Protection for Arduino-Based Smart Lockers
598	Privacy-First Federated Learning Models for Scalable Healthcare Data Processing
599	EAST: Edge-Aware Self-Supervised Transformer for Privacy-Compliant Video Analysis
600	The role of the strategic mindset of the leader in enhancing the benefits of artificial intelligence applications in educational organizations
601	ReinNN_GT: Reinforced Neural Network with Game theory based intrusion detection in Wireless Sensor Network
602	Hybrid Deep Learning Approach for Advanced Detection of GAN-Generated Images
603	Optimizing Dual-Slot Antenna Performance for 6G Frequencies Using Digital Transformation and Machine Learning Techniques
604	Artificial Neural Networks for Optimizing Energy Use and Solar Power Distribution in Hybrid Microgrids
605	Byzantine-Resilient Federated Deep Learning for Secure and Privacy-Preserving Smart Healthcare Using Krum
606	Introducing UOM-Dataset: Object Detection Dataset with Performance Evaluation of YOLOv10–v12
608	Systematic Review: Machine Learning Approaches for Detecting Illicit Activities in Bitcoin Transactions
609	Enhancing Virtual Private Network (VPN) Security via Dynamic Key Rotation: A Theoretical and Partial Simulation Study
610	Adaptive Machine Learning Models for Cloud-Based Security Risk Evaluation and Incident Prediction
611	Fine-Grained Emotion Recognition from Short Video Clips Using CNN-LSTM with Facial Action Heatmaps
612	Classification of Radio Frequency Interference Using Relative Speed Estimation in Vehicular Ad-hoc Networks: A Review
614	Towards Securing Smart Homes: A Practical SRAM PUF-Based Two-Factor Authentication Framework
616	A Blockchain-Based ERC-1155 Consent Framework for Secure and Compliant EHR Access Control
617	Evaluating Lightweight Machine Learning Algorithms for Malware Detection in Resource Limited Environments
618	Recognizing Phishing in Emails by Using Natural Language Processing & Machine Learning Techniques
619	A Quantitative Cybersecurity Risk Framework for Regional Development Banks: An OSINT-Based Analysis in Indonesia
620	Mitigation Strategy for SYN Flood Attacks in Software Defined Network Architecture with Firewall
621	Detection of Complex Patterns and Anomalies in Power System Data
622	The Use of Financial Technology and Artificial Intelligence in International Economic Relations in the Arab Gulf Region and cyber resilience

624	Key Factors Influencing Situational Awareness for Incident Response in Healthcare
625	Analyzing the Impact of Chatbots Using Artificial Intelligence in Treating Psychological Disorders: A Bibliometric Study
626	The Role of Human-Computer Symbiosis in Advancing English Language Education through Smart Technologies
627	Analyzing the Impact of the Internet of Things on Clinical Psychology and Mental Health: A Systematic Review
628	DNS Exfiltration Attack and Dataset Generation for Machine Learning-Based Detection
630	CI/CD Pipeline Optimization for the MERN Stack on AWS with Docker Integration
631	A Review of Deep Learning Approaches for Driver Drowsiness Detection with Privacy and Security Considerations
632	Hybrid Framework of Whale Optimization and Convelution Neural Network for Osteoporosis Diagnosis
634	Enhancing Fraud Detection via Synthetic Data Augmentation and Ensemble Methods
635	Evaluating the Performance of Quantum and Classical GANs on 2D Statistical Distributions for AI-Driven Cybersecurity Modeling
636	Machine Learning-Based Gesture Classification Using Hybrid EMG and MMG Signals for Upper Limb Prostheses
637	Prioritization and Filtering using an Adaptive Model for Early Decision-Making in Workflow Systems
638	More Knowledge, Less Impulse: The Negative Moderating Role of Financial Literacy on Buy-Now-Pay-Later Adoption
639	Generative Artificial Intelligence for code generation based on CodeT5 algorithm
641	Developing Robust AI Models for Identification Friend and Foe
643	STRATEGIC RISK INTELLIGENCE: A DUAL-FRAMEWORK APPROACH USING OCTAVE ALLEGRO AND STRIDE
646	Content Based Image Retrieval Using Fused Deep Neural Networks
654	Predicting Cardiovascular Disease Risk Using Transformer Networks and Electronic Health Records
662	Edge AI for Smart Healthcare: Real-Time Vital Sign Monitoring and Predictive Alerts in Emergency Care
664	Implementation of CSMA with GNU-Radio for Secure and Efficient Communication Between Cabin Crew and Cockpit
668	AI-Driven Enhancements for Secure and Efficient Communication in Aviation Using CSMA and GNU-Radio
678	Bayesian Analysis Empowering Legal Forensics Within Criminal Data Breach Prosecution Investigations
686	Automating CTI Workflows with LLMs: Processing, Analyzing, and Defending in One Model
690	Emotion-Aware Course Personalization in Virtual Classrooms via Multi-Modal Fusion Learning
691	Revolutionizing Personalized Medicine: AI-Driven Predictive Analytics for Disease Diagnosis and Treatment Optimization
692	Comprehensive Analysis of Security Challenges and Mitigation Strategies in 5G Mobile Wireless Networks
693	Developing a Graphical User Interface for linking the Backscattering Sensor (BB3) to acquire real-time data
694	Adaptive Edge-Based Thresholding for Robust ORB Keypoint Detection Under Varying Illumination
697	Empowering Consumers Through Data Ownership and Transparency in Digital Marketing
699	Intelligent Security Framework for Real-Time Threat Detection and Response in Cloud Networks Using Deep Reinforcement Learning and Federated Anomaly Detection
700	The Influence of Virtual Reality on Marketing Education in Jordan: A Developing Synthesis
701	Impact of E-CRM on Market Share of the Beauty Centers
703	The Effect of Mobile Marketing on Consumer Engagement in the Retail Sector
704	Deep Learning-Based Early Detection of Alzheimer's Disease Using MRI and Cognitive Assessment Data
711	Smartphone Applications in Smart Homes: an Overview
720	A Reinforcement Learning Framework for Intelligent Detection of Bad Data in Power System State Estimation
737	Corporate Legal Liability in Environmental Crimes: An Analytical Study in the Context of Climate Change

774	Deep Learning Framework for Predicting Human Characteristics with Improved Illumination and Angle Detection
777	Artificial Intelligence in Cyber Threat Intelligence: A Systematic Review of Techniques and Applications
781	Trading Vulnerability Mitigation Using Adaptive Legal Frameworks and Compliance Intelligence Tools
784	Cyber Law Document Classification and Topic Modeling with BERTopic and Legal Corpus Analysis
786	Cross-Device Evidence Mapping in Cybercrime Investigations Using Siamese Neural Networks
789	Tamper-Proof Legal Document Storage in Digital Courts Using Hyperledger Fabric Framework
792	Sentiment Extraction in Financial Texts from Decentralized Markets Using RoBERTa Language Model
794	Legal Document Recovery and Tamper Detection Using U-Net for Historical Watermarked Archives
795	Overcoming Challenges in AI-Powered NLP Models: Enhancing the Capabilities of ChatGPT and DeepSeek
797	Beyond Detection: Ensemble Learning for Arabic Fake News Identification and Proactive Social Media Blocking
798	Image-Based Steganography for Hidden Text Application using the LSB Approach
799	An explainable Recursive Feature Elimination to detect Advanced Persistent Threats using Random Forest classifier
801	A Secure and Privacy-Aware in Goat Milk Quality Classification using TOPSIS
802	Enhancing Robustness and Scalability in AI-Powered Natural Language Processing: A Novel Hybrid Deep Symbolic Framework
803	A Hierarchical Cluster-Based Lightweight Adaptive Intrusion Detection Model with Dynamic Feature Selection (HCID-DFS) for IoT Security
804	Digital Banking Infrastructure Resilience Through Legal Safeguards and Financial Risk Response Mechanisms
805	Employee Behavior Prediction in Government Networks Using Long Short-Term Memory Networks
806	The Impact of Artificial Intelligence on Criminal Liability in Bahraini and Comparative Law
807	Financial Fraud Detection based Predictive Analytics in High-Frequency Digital Payment Channels
808	Adaptive AI-Driven Cybersecurity Framework for Threat Detection and Response in Networks
809	AI-Driven Secure Audit Trails for Financial Compliance Using Immutable Blockchain Logs
812	Cryptocurrency Market Oversight Strengthened by Financial Surveillance Automation Tools
813	Legal and Ethical Challenges in Using Artificial Intelligence in Criminal Investigations
814	Drone Swarm Traffic Optimization in Emergency Zones via Ant Colony Optimization Technique
815	Quantum Cryptography for Smart Grid Cyber-Physical Systems: A Comparative Review
816	Engaging Gen Z Through Personalized Social Media Content: The Mediating Role of Perceived Relevance on Platform Engagemen
817	The Ethical Implications of Data Privacy and Personalization in Digital Marketin
818	Adaptive Curriculum Generation in Mobile Learning Systems Using Graph Attention Networks
819	Privacy-Preserving Aggregation in IoT Sensor Networks via Federated Averaging Algorithm
822	Lightweight Cryptographic Protocol for Secure Microtransactions in Mobile Applications
823	Criminal Liability of Legal Persons in Cybersecurity Crimes: A Comparative Study with Bahraini Legislatio