

**International Conference on Cybertechnology and
Future Networks
ICCFN 2025
December 22-23, 2025
Program**



Monday, December 22 2025	
08:30-09:30	Onsite registration & Coffee
Opening session and Keynote Talks – 9am to 11:00am Main Room Teams Link	
09:30-10:00 <i>Main Room</i>	Opening & Welcome Chairs: ○ General Chair: Prof. Hisham Kholidy, Northern Illinois University, USA. ○ Local Organizing Chair: Prof. Aliaa Youssif, AASTMT, Egypt.
10:00-11:00 <i>Main Room</i>	Keynote speaker: Dr. Björn Grüning Keynote Title: From Genomes to Galaxies: Two Decades of Scalable, Open Data Analysis Chair: Prof. Nahla Ahmed Belal
Breakfast 11:00-11:15	Breakfast
11:15-12:15 <i>Main Room</i>	Keynote speaker: Prof. Saif Khairat Keynote Title: "AI-Enhanced Care in Future Networks: Integrating Patient-Facing Technologies for Equitable 6G-Enabled Telehealth" Chair: Prof. Nahla Ahmed Belal
12:15-13:00 <i>Main Room</i>	ICCFN Panel: “AI Applications in Various Domains” Chair: Prof. Nahla Ahmed Belal. Teams Link: Panel Members: • Prof. Aliaa Youssif, AASTMT, Egypt. • Prof. Saif Khairat, the University of North Carolina at Chapel Hill, USA. • Prof. Hisham Kholidy, Northern Illinois University, USA. • Dr. Aliah Zafer, Al Yamamah University, Saudi Arabia. • Dr. Abdulrahman Azab, Sigma2, Norway.
13:00-14:00 (in person) Session 1:	• Topic Title: Cybersecurity, Risk Management, and Sensitive Data Management Session 1 Teams Link Room: 504 Chair: Dr. Mohamed Essam Khedr Presenters, Titles • Virtualized Real-Time Flow-based IDPS for Modbus/TCP Traffic, <i>Mamdouh Muhammad</i> • Advanced Cybersecurity Through Hybrid RF-MLP for Intrusion Detection on Merged Network Datasets, <i>Hesham Kamal</i> • Dynamic Consensus in Blockchain using Proximity Policy Optimization Social-Media-Driven Cyber Threat, <i>Nora Kasiem, Heba Aslan</i>
	• Topic Title: Computer Vision, and Image Processing Session 1 Teams Link Room: 506 Chair: Dr. Mohamed Safi Elwan Presenters, Titles • SSIM Enhancement in Ultrasound Image Denoising Through Advanced Wavelet-Bilateral Filter Integration, <i>Mahmoud Abdulsalam</i> • Arabic GAN-CNN: Verifying Egyptian ID Authenticity via AI, <i>Mazen Ahmed</i> • The Hardware Imperative: The Co-Evolution of Hardware Architectures and Visual Intelligence, <i>Abd El-Hameed Ahmed</i>

	- Topic Title: LLM, Business Innovation and Cybertechnology Entrepreneurship Session 1 Teams Link Room: 508 Chair: <i>Dr. Mahmoud Ashry</i> Presenters, Titles: - An Intelligent LLM-Driven Framework for Context-Aware Anti-Money Laundering Analysis, <i>Mariam Ghoniem</i> - Lean Startup Dynamics and Business Model Innovation: The Case of Tamam in Saudi Arabia's Vision 2030 Ecosystem, <i>Aliah Zafer</i> - Social-Media-Driven Cyber Threat Intelligence Enabled by NLP, LLMs, and Automated Data Pipelines, <i>Vishnu Kommareddy</i>
14:00-15:00	Lunch
15:00-16:00	Keynote Speaker: Dr. Ibrahim (Abe) Baggili Keynote Title: Tales from the BiTLab Teams Link Chair: Dr. Mohamed Safi Elwan
Coffee Break 16:00-16:30	Coffee Break
16:30-17:30 Session 2:	- Topic Title: Quantum Computing and Quantum Communication Session 2 Teams link: Room: 504 Chair: <i>Dr. Nahla Ahmed Belal</i> - Hybrid Classical-Quantum Cryptographic Operation Scheduling with Dynamic Algorithm Selection and Multi-Objective Resource Optimization, <i>Zachary Kleckner</i> - How Quantum Key Distribution Secure Encryption Methods in the Advent of Practical Quantum Computers: BB84 Protocol Analysis, <i>Bella Liu</i> - Survey on Quantum Safe and Quantum Teleportation in 6G Networks, <i>Ahmed Darwesh</i>

	- Topic Title: 6G, LLM, and Future Networks Session 2 Teams link: Room: 506 Chair: <i>Dr. Hisham Kholidy</i> Presenters, Titles - Cybersecurity and Smart Vehicle Powered 5G Testbed for Student Education, <i>Yussuf Elazzazi</i> - Towards Zero-Trust Security in the Network Slicing for 6G Autonomous Vehicular Systems, <i>Yussuf Elazzazi</i> - Security and Safety in Multimodal Large Language Models: A Benchmark-Driven Analysis of Attacks, Hallucinations, and Defenses, <i>Subikshaa Ramachandran</i>
	- Topic Title: AI, ML, and Cybersecurity Session 2 Teams link: Room: 508 Chair: <i>Dr. Mohamed Essam Khedr</i> Presenters, Titles - RAISE: Risk Assessment of Control and Defense-Aware Smart Home Control System, <i>Nur Imtiazul Haque</i> - An AI-Based Palliative Care System for Stress Monitoring and Response, <i>Mohamed Nassar</i> - Physics-Informed Explainable ML for Robust Biosensor Optimization, <i>Mennatallah Elsayed</i>
17.30-19.00	Dinner and Closing of Day 1
Tuesday, December 23 2025. (ONLINE) Main Teams Link	
09:30-10:30	Keynote speaker: Abdulrahman Azab Keynote Title: LUMI AI Factory Chair: Dr. Nahla Ahmed Belal
10:30-11:30	Keynote speaker: <i>Tomasz Malkiewicz</i> Keynote Title: An overview of e-Infrastructure-related Nordic Collaboration activities: Selected ongoing and planned cybersecurity-related activities. Chair: Dr. Nahla Ahmed Belal
Break 11:30-12:00	Online Break
12:00-13:15	Chair: <i>Dr. Shady Elsaid</i> Teams Link - Topic Title: AI/Machine-Learning Session 1 Presenters, Titles - The Impact of Statistical Diagnosis in Controlling and Monitoring the Progression of Type 2 Diabetes”, <i>ElMehdi Berber</i> - Benchmarking Traditional Feature Extraction and Deep Learning Architectures for Brain Tumor Classification, <i>Salma elbadry, Fady Sameh, Shady Mohammed</i> - Liver Cirrhosis Classification using Deep Neural Networks, <i>Priya Mittal</i> - ARA-Legal Meta: Building a Foundational Arabic Legal Dataset with Rich Metadata and Verified Ground Truth, <i>Khlood El-Behiry, Mahmoud Yasin, Nora El-Rashidy</i>.

	• Topic Title: Cybersecurity, Risk Management, and Sensitive Data Management Session 1 Teams Link Chair: <i>Dr. Hisham Kholidy</i> Presenters, Titles • A Zero-Trust Security Framework for Nigerian Financial Institutions, <i>Muhees Olawale</i> • Real-Time AI-Driven Behavioral Modeling in 3-D Secure ACS for Bot Fraud Detection, <i>Thrivikram Eskala</i> • Fluid Internet States: Detecting Anomalies through Continuous Observation, <i>Vish Hiremath</i> • Dynamic Network Control: Validating Large-Scale Service Provider Implementations through Adaptive Filtering Analysis, <i>Vish Hiremath</i> • Securing WiFi Home Security Camera OTA Updates Against DNS Spoofing and Protocol Downgrade Attacks Using Packet Level Analysis, <i>Gautham Nair</i> • Design and Evaluation of a Dual-Lock Cryptographic Bootloader With UART Deinitialization and Restricted Debug Shell Access, <i>Advait Deshmukh</i>
Break 13:15-13:30	Online Break
13:30-14:45	• Topic Title: Cybersecurity, and Federated Resource Management Session 2 Chair: <i>Dr. Hisham Kholidy</i> Teams Link Presenters, Titles • Dynamic Adaptation in Virtualized Networks: An Orchestration Paper on Feedback-Driven Service Provisioning, <i>Vishwanath Hiremath</i> • Dynamic Network Control: Validating Large-Scale Service Provider Implementations through Adaptive Filtering Analysis, <i>Vishwanath Hiremath</i> • Fluid Internet States: Detecting Anomalies through Continuous Observation, <i>Vishwanath Hiremath</i> • Self-Supervised Vision Transformer with Metadata Fusion for Skin Cancer Diagnosis, <i>JEMINA J</i> • Post-Quantum Cryptography and Quantum Key Distribution: A Comparative Analysis for Secure Network Infrastructure, <i>Oyeyemi Oyebode</i> • Multi-Stage Attack Detection and Risk Assessment in the SCADA, <i>Akshay Bahoit.</i>
Break 14:45-15:00	Online Break
15:00-16:00	Keynote speaker: Dr. Biswaranjan Senapati Keynote title: The advent of Quantum Computing: How innovative quantum AI technology transforms smart and advanced manufacturing technologies, EVs, and Battery Cell Manufacturing Industries. Teams Link Chair: Dr. Hisham A. Kholidy
16:00-16:15	Conference Closing Session