

International Workshop on 6G and Beyond
IPN, Cancun, Mexico
NOVEMBER 3-7, 2025

DAY	SCHEDULE	TITLE	AUTHORS	AFFILIATION	SESSION
MONDAY, NOVEMBER 3, 2025					
nov-03	09:30-09:45	Cybersecurity and System Resilience for Deep Learning in Construction and demolition Waste Classification	Staycy Guevara, Ana Lucila Orozco Sandoval and Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session I
nov-03	09:45-10:00	Audio-visual Fusion Technique for Detecting Sensitive Content in Videos	Daniel Povedano Álvarez, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session I
nov-03	10:00-10:15	Use of Natural Language Processing Techniques for Forensic Analysis in Spanish	Luis Alberto Martínez Hernández, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session I
nov-03	10:15-10:30	Detection of vulnerabilities in TensorFlow using BERT and LSTM	Sergio Muñoz Martín, Luis Alberto Martínez Hernández, Sandra Pérez Arteaga, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session I
nov-03	10:30-10:45	Privacy and Security in Mobile Applications Assisted by Artificial Intelligence	Sandra Pérez Arteaga, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session I
nov-03	10:45-11:00	Adversarial Attacks on Machine Learning Models for Network Traffic Filtering	Luis Alberto Martínez Hernández, Sandra Pérez Arteaga, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session I
nov-03	11:00-11:15	Bridging Forecasts and Mitigation through Retrieval-Augmented Time-Series Models for Cybersecurity Incidents	Aldo Hernandez-Suarez, Gabriel Sanchez-Perez, Linda Karina Toscano-Medina, Hector Perez-Meana, Jose Portillo-Portillo, Jesus Olivares Mercado, Enrique Escamilla-Hernandez and Luis Javier García Villalba	Instituto Politécnico Nacional, Mexico	Session I
nov-03	11:15-11:30				
nov-03	11:30-13:00	Dr. Luis Martínez IPN México (ONLINE)			
nov-03	13:00-14:30				
nov-03	14:30-14:45	Strengthen the "weakest link" in the chain of protection against cybercrime, Train users.	José Agustín Portas Yáñez, Ana Lucila Sandoval Orozco and Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session II
nov-03	14:45-15:00	Towards Reliable 6G: Intelligent Trust Assessment with Hybrid Learning	Elmira Saeedi Taleghani, Ronald Ivan Maldonado Valencia, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session II
nov-03	15:00-15:15	Multi-dimensional and Traceable Trust Assessment in 6G networks	Jesús A. Alonso López, Ronald Iván Maldonado Valencia, Ana Lucila Sandoval Orozco and Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session II
nov-03	15:15-15:30	Transparent Trust Assessment in 6G Using Blockchain	Ronald Iván Maldonado Valencia, Elmira Saeedi Taleghani, Jesús Angel Alonso López, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session II
nov-03	15:30-15:45	From Pose to Pitch: Classifying Baseball Pitch Types with Projection-Gated ST-GCN	Sergio Huesca-Flores, Gibran Benitez-Garcia, Oswaldo Juarez-Sandoval, Hiroki Takahashi and Mariko Nakano-Miyatake	Instituto Politécnico Nacional, Mexico	Session II
nov-03	15:45-16:00	Audio-Based Drone Detection System Using FFT And Machine Learning Models	Leonardo Vicente Jimenez, Gabriel Sanchez Perez, Jose Portillo Portillo, Linda Karina Toscano Medina, Aldo Hernandez Suarez, Jesús Olivares Mercado, Hector Perez Meana and Luis Javier García Villalba	Instituto Politécnico Nacional, Mexico	Session II
nov-03	16:00-16:15	Design and Implementation of a UART Module on FPGA Using RTL for Cryptographic Encryption and Decryption Techniques	Chrisitan Antonio Colin Cejudo, Gonzalo Issac Duchén Sánchez and Gabriel Sánchez Pérez	Instituto Politécnico Nacional, Mexico	Session II
nov-03	16:15-16:30				
nov-03	16:30-16:45	A Lightweight Deep Learning Framework for Robust Video Watermarking in Adversarial Environments	Antonio Cedillo-Hernandez, Lydia Velazquez-Garcia and Manuel Cedillo-Hernandez	TEC de Monterrey, Mexico	Session III
nov-03	16:45-17:00	Bridging the Data Gap in ML-Based NIDS: An Automated Honeynet Platform for Generating Real-World Malware Traffic Datasets	Gabriel Ulloa Cano, Gabriel Sanchez Perez, Jose Portillo Portillo, Linda Karina Toscano Medina, Aldo Hernandez Suarez, Jesus Olivares Mercado, Hector Perez Meana, Luis Javier García Villalba and Pablo Velarde Alvarado	Instituto Politécnico Nacional, Mexico	Session III
nov-03	17:00-17:15	Dynamic facial expression recognition by concatenation of raw, semi-raw, and distance features	Jose Armando Sotelo Barrales, Mariko Nakano Miyatake, David Mata Mendoza, Hector Manuel Perez Meana and Enrique Escamilla Hernandez	Instituto Politécnico Nacional, Mexico	Session III
nov-03	17:15-17:30	Towards electoral digitization: Automatic classification of handwritten numbers in PREP system records	Miguel Angel Camargo Rojas, Gabriel Sánchez Pérez, José Portillo Portillo, Linda Karina Toscano Medina, Aldo Hernández Suárez, Jesús Olivares Mercado, Héctor Manuel Pérez Meana and Luis Javier García Villalba	Instituto Politécnico Nacional, Mexico	Session III
nov-03	17:30-17:45	TransLowNet: An Online Framework for Video Anomaly Detection, Classification, and Localization	Jonathan Flores, Gibran Benitez, Mariko Nakano-Miyatake, Hiroki Takahashi and Hector Perez-Meana	Instituto Politécnico Nacional, Mexico	Session III
nov-03	17:45-18:00	Leveraging MFCC and Mel-Spectrogram Representations for Deep Learning-Based Speech Recognition	Jose Antonio Lopez Olvera, Hector Manuel Pérez Meana, Elizabeth Garcia Rios and Enrique Escamilla Hernandez	Instituto Politécnico Nacional, Mexico	Session III

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DAY	SCHEDULE	TITLE		AUTHORS	AFFILIATION	SESSION
TUESDAY, NOVEMBER 4, 2025						
nov-04	09:30-11:00	Aldo Hernández (Microsoft Fabric: The Ultimate Solution for Deploying Machine Learning Applications) IPN México (ONLINE)				
nov-04	11:00-11:30					
nov-04	11:30-13:00	Jose Portillo (Biometrics and cybersecurity: Beyond passwords in digital protection) IPN Mexico (In Person)				
nov-04	13:00-14:30					
nov-04	14:30-14:45	Reinforcement Learning for the Optimization of Adaptive Intrusion Detection Systems	Óscar Mogollón-Gutiérrez, David Escudero García, José Carlos Sancho Núñez and Noemí DeCastro-García		Universidad de Extremadura, Spain	Session IV
nov-04	14:45-15:00	MAS-Hunt: A Resilient AI Multi-Agent System for Threat Hunting	Paulo Matheus Silva, Daniel A. Silva, Robson Albuquerque, Georges D. A. Nze and Fábio L. L. Mendonça		University of Brasilia, Brazil	Session IV
nov-04	15:00-15:15	Shield-X: Vectorization and Machine Learning-Based Pipeline for Network Traffic Threat Detection	Cláudio Henrique Marques de Oliveira, Marcelo Ladeira, Gustavo Cordeiro Galvão Van Erven and João José Costa Gondim		University of Brasilia, Brazil	Session IV
nov-04	15:15-15:30	Maturity Models in Information Security Audits	Daniel Zamora Jiménez, Lidia Prudente Tixteco y Pablo Ramón Mercado Hernández		Instituto Politécnico Nacional, Mexico	Session IV
nov-04	15:30-15:45	Methodology for Rapid Security Testing of IP Cameras	Lidia Prudente-Tixteco, Gabriel Sánchez-Pérez, Jesús Olivares-Mercado y Aldo Hernández-Suárez		Instituto Politécnico Nacional, Mexico	Session IV
nov-04	15:45-16:00	SMS processing using Optical Character Recognition for Smishing Detection	Lidia Prudente-Tixteco, Jesús Olivares-Mercado y Karina Toscano-Medina		Instituto Politécnico Nacional, Mexico	Session IV
dic-04	16:00-16:15	DNP3 protocol taxonomy	Jacinto Pérez García, Ana Lucila Sandoval Orozco and Luis Javier García Villalba		Universidad Complutense de Madrid, Spain	Session IV
nov-04	16:15-16:30					
nov-04	16:30-18:00	Gibran Benítez (Fighting Deepfakes: A Practical Workshop on Generalizable Detection via Up-Sampling Artifacts) UEC Japan (Online)				
WENESDAY, NOVEMBER 5, 2025						
nov-05	09:30-11:00	Victor Sánchez Warwick UK (ONLINE)				
nov-05	11:00-11:30					
nov-05	11:30-13:00	Dr. Georges Amvame Nze (Synergizing AI and Cybersecurity: Deploying and Testing AI and Cybersecurity Solutions in Campus Network Emulation Environments for Threat Detection and Response) University of Brasilia (ONLINE)				
nov-05	13:00-14:30					
nov-05	14:30-16:00	MINI CTF				
nov-05	16:00-16:30					
nov-05	16:30-18:00	MINI CTF				
THURSDAY, NOVEMBER 6, 2025						
nov-06	09:30-11:00	Ángela Toribio y Paula Navarro MDPI Academic Publishing Workshop (ONLINE)				
nov-06	11:00-11:30					
nov-06	11:30-11:45	Ensuring the Secure Integration of Generative AI in Video Game Developments	Pablo Natera, Pablo Fernandez, Pablo Garcia, Antonio Silva, Ruth Torres and Alberto Carron		Universidad de Extremadura, Spain	Session V
nov-06	11:45-12:00	Cybersecurity and System Resilience for Deep Learning in Construction and demolition Waste Classification	Ruth Torres, Andres Caro, Mohammadhossein Homaei, Pablo Natera and Pablo Fernandez		Universidad de Extremadura, Spain	Session V
nov-06	12:00-12:15	Exploring the real capabilities of the Flipper Zero	Francisco Javier Muñoz Ruiz, Agustín Javier Di Bartolo, Fernando Broncano-Morgado, Belén Ramírez Gabardino and Mar Ávila		Universidad de Extremadura, Spain	Session V
nov-06	12:15-12:30	Adaptive probabilistic event reasoning for group detection in multi-agent crowd simulations	Marlon Cardenas Bonett, Susana Bautista Blasco and Penelope Etayo Sotos		Universidad Francisco de Vitoria, Spain	Session V
nov-06	12:30-12:45	Monitoring water quality in small reservoirs using Sentinel-2 imagery and deep learning	Victoria Amores Chaparro, Fernando Broncano-Morgado, Pablo Fernández-González, Jesús Torrecilla and Aurora Cuartero		Universidad de Extremadura, Spain	Session V
nov-06	12:45-13:00	Vulnerabilities in the DNP 3.0 Communication Protocol in ICS/SCADA Systems on Critical Electrical Infrastructure	Jacinto Pérez García, Ana Lucila Sandoval Orozco and Luis Javier García Villalba		Universidad Complutense de Madrid, Spain	Session V

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nov-06	13:00-14:30				
nov-06	14:30-16:00	MINI CTF			
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nov-06	16:30-18:00	MINI CTF			
FRIDAY, NOVEMBER 7, 2025					
nov-07	09:30-11:00	Dr. Andrés Caro Lindo (Artificial Intelligence for intrusion detection using side channel techniques) Universidad de Extremadura (ONLINE) Dr. Pablo García Rodríguez (From Camera to Algorithm: OpenCV and AI Workshop for the Cybersecurity of the Future) Universidad de Extremadura (ONLINE)			
nov-07	11:00-11:30				
nov-07	11:30-11:45	From Vibe Coding to Jailbreaking in Large Language Models: A Comparative Security Study	Eduardo Salas Castillo, Alejandra Guadalupe Silva Trujillo, Marian Sanchez Ibarra, Daniel Juárez Domínguez and Juan Carlos Cuevas Tello	Universidad Autónoma de San Luis Potosí, Mexico	Session VI
nov-07	11:45-12:00	Multi-objective generation of S-boxes using evolutionary algorithms	Enrique Dávalos, Christian von Lücken, Adolfo Salas and Javier Benítez	Universidad Nacional de Asunción, Paraguay	Session VI
nov-07	12:00-12:15	Blockchain-Enabled IoT for Smart Food Traceability: Cost and Performance Insights	Hari Sannamuri	University of Central Oklahoma, USA	Session VI
nov-07	12:15-12:30	Identifying PE32 binary files obfuscated with XOR using symbolic execution techniques	Bruce Azevedo, Luis Villalba and Robson Albuquerque	Universidad Politécnica de Madrid, Spain	Session VI
nov-07	12:30-12:45	Immersive technologies for aeronautical training: Implementation of Virtual Reality in complex approaches at Colombian airports	Louis Meziat Castro	SENA, Colombia	Session VI
nov-07	12:45-13:00	Optimizing Scientific Data Transfers with Software-Defined Networking	Vishal Makwana	University of Bridgeport, USA	Session VI
nov-07	13:00-14:30				
nov-07	14:30-14:45	Explainable Reputation Estimation from Web Service Reviews	Elmira Saeedi Taleghani, Ronald Ivan Maldonado Valencia, Ana Lucila Sandoval Orozco y Luis Javier García Villalba	Universidad Complutense de Madrid, Spain	Session VII
nov-07	14:45-15:00	Graph-Based Analysis of Cyber Threat Intelligence Using Honeypot Data and Standardized Models	Naveen Krishna Nathani	Concordia University St Paul, USA	Session VII
nov-07	15:00-15:15	Intelligent Agent-Driven Test Artifact Synthesis with Dynamic Environmental Feedback	Shahzaib Khan	Trine University, USA	Session VII
nov-07	15:15-15:30	Unmasking Covert Channels: A Threat Detection Paper	Fahad Amin and Usman Imtiaz	North American University, USA	Session VII
nov-07	15:30-15:45	Blockchain-Based Energy Metering and Billing: Improving Scalability, Security, and Efficiency	Tasmiya Mujawar	California Lutheran Univeristy, USA	Session VII
nov-07	15:45-16:00	Adaptive Neural Models for Encrypted Traffic Analysis: A Step Towards Secure Network Intelligence	Ashok Kumar Reddy Kuturla	Depaul university, USA	Session VII