

PST2025 Preliminary Program			
27 AUGUST 2025 (ADT Time)			
8:00 – 16:00	Conference On-Site Registration		
8:30 – 8:45	Welcome Speeches -- Dr. Ali Ghorbani and Dr. Rongxing Lu		
8:45 – 9:45	Invited Talk 1 (in-person) -- Dr. Sébastien Gambs		
9:45 – 10:15	Morning Break and Poster Presentations		
10:15 – 11:55	In-Person Session PS1	In-Person Session PS2	Online Session OS1
11:55 – 13:00	Lunch		
13:00 – 14:00	Invited Talk 2 (online) -- Dr. Lingyu Wang		
14:00 – 15:40	In-Person Session PS3	In-Person Session PS4	Online Session OS2
15:40 – 16:10	Afternoon Break and Poster Presentations		
16:10 – 17:30	In-person CIC Cybersecurity 4MT Competition		Online Session OS3
18:30 – 21:00	Banquet		
28 AUGUST 2025			
8:00 – 12:00	Conference On-Site Registration		
8:00 – 8:45	Networking		
8:45 – 9:45	Invited Talk 3 (in-person) -- Dr. Roozbeh Razavi-Far		
9:45 – 10:15	Morning Break and Poster Presentations		
10:15 – 11:55	In-Person Session PS5	In-Person Session PS6	Online Session OS4
11:55 – 13:00	Lunch		
13:00 – 14:40	In-Person Session PS7	In-Person Session PS8	Online Session OS5
14:40 – 15:10	Afternoon Break and Poster Presentations		
15:10 – 16:30	In-Person Session PS9		Online Session OS6
16:30 – 16:50	Closing		

*Posters will be displayed during both days (27th and 28th). Poster presenters are expected to be at the poster display area during the refreshment breaks.

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27 AUGUST 2025, 10:15 – 11:55	
In-Person Session PS1: Malware Detection with Machine Learning	
Room: Aitken Room	
Chair: Mahdi Rabbani	
<ul style="list-style-type: none"> • Paper ID 7: Using Counterfactuals for Explainable Android Malware Detection Authors: Maryam Tanha, Winston Zhao, Aaron Hunter, Ashkan Jangodaz • Paper ID 107: TOM-Net: Few-Shot IoT Malware Classification via Open-Set Aware Transductive Meta-Learning Authors: Man-Ying Chen, Tao Ban, Shin-Ming Cheng, Takeshi Takahashi • Paper ID 109: Evaluating Efficient Patch-Based Backdoor Attacks in Satellite Image Classification Systems Authors: Ghazal Rahmanian, Pooria Madani 	

- **Paper ID 130:** A Per-Bag Suspicion-Based Bagging Strategy for Fighting Poisoning Attacks in Classification
Authors: Aghoghomena Akasukpe, Tomi Adeyemi, Pooria Madani, Li Yang, Miguel Vargas Martin
- **Paper ID 133:** Harnessing Language Models to Analyze Android App Permission Fidelity
Authors: Yunik Tamrakar, Ritwik Banerjee, Ethan Myers, Lorenzo De Carli, Indrakshi Ray

27 AUGUST 2025, 10:15 – 11:55

In-Person Session PS2: Privacy-Preserving Data and Image Processing

Room: J. Harper Kent Auditorium

Chair: Sara Miller

- **Paper ID 40:** CONTEXT-AWARE LOCATION DE-IDENTIFICATION USING DENOISING DIFFUSION
Authors: Md Shopon, Marina Gavrilova
- **Paper ID 99:** Private Function Evaluation using CKKS-based Homomorphic Encrypted LookUp Tables
Authors: Haoyun Zhu, Takuya Suzuki, Hayato Yamana
- **Paper ID 151:** Privacy-Preserving Image Learning Across Trust Boundaries
Authors: Atsuko Miyaji, Tomoshi Yagishita, Yuki Hyohdoh

27 AUGUST 2025, 10:15 – 11:55

Online Session OS1: Anomaly Detection and Vulnerability Analysis

Room: Chancellor's Room

Chair: Mohammad Jafari Dehkordi

- **Paper ID 75:** Exploring Clustering Algorithms for Anomaly Detection in Electric Vehicle Charging Stations Infrastructure using OCPP
Authors: Chris Tchassem, Yendoubé Kombate, Pierre-Martin Tardif
- **Paper ID 93:** Legal Retrieval Augmented Generation with Structured Retrieval and Iterative Refinement
Authors: Chaitanya Dhananjay Jadhav, Chang Liu, Jun Zhao
- **Paper ID 136:** Characterizing Event-themed Malicious Web Campaigns: A Case Study on War-Themed Websites
Authors: Maraz Mia, Mir Mehedi Ahsan Pritom, Tariqul Islam, Shouhuai Xu
- **Paper ID 149:** TFVDFuzzer: Transformer-based Fuzzing Framework for Vulnerability Detection in Modbus Protocol
Authors: Ahmed Reda Aldysty, Nour Moustafa, Erandi Lakshika
- **Paper ID 154:** Database Systems Examination and Digital Forensics Tool: the Progress and Limitations
Authors: Oluwasola Mary Adedayo

27 AUGUST 2025, 14:00 – 15:40
In-Person Session PS3: Cryptographic Techniques and Secure Systems
Room: Aitken Room
Chair: Vikas Chouhan
<ul style="list-style-type: none"> • Paper ID 2: A Static Analysis of Popular C Packages in Linux Authors: Jukka Ruohonen, Krzysztof Sierszecki, Mubashrah Saddiqa • Paper ID 50: CHOO-PIR: Hint-Based Private Information Retrieval with Commodity Servers Authors: Kittiphop Phalakarn, Ryuya Hayashi • Paper ID 114: Empirical Evaluation and Reclassification of Cryptographic Algorithms for Energy-Efficient Secure Communication in Medical IoT Devices Authors: Sidra Anwar, Jonathan Anderson • Paper ID 116: Comparing Client- & Server-Side AEAD Encryption in Software-Defined Storage Systems Authors: David Mohren, Minh Tien Truong, Brett Kelly, Kenneth Kent • Paper ID 158: Securing Android Inter-Process Communication (IPC) Using NGAC Authors: Jason Simental, Elmaddin Azizli, Mahmoud Abdelgawad, Indrakshi Ray

27 AUGUST 2025, 14:00 – 15:40
In-Person Session PS4: Intrusion Detection and Threat Mitigation
Room: J. Harper Kent Auditorium
Chair: Hossein Shokouhinejad
<ul style="list-style-type: none"> • Paper ID 74: Cyber Threat Mitigation with Knowledge-Infused Reinforcement Learning and LLM-Guided Policies Authors: Md. Shamim Towhid, Shahrear Iqbal, Euclides Neto, Nashid Shahriar, Scott Buffett, Madeena Sultana, Adrian Taylor • Paper ID 78: On Feature Selection for Botnet Detection using Adaptive Exploration in Binary Particle Swarm Optimization Algorithm Authors: Syed Tehjeebuzzaman, Mustafa Siam-Ur-Rafique, Ashikur Rahman, Abderrahmane Leshob, Raqeebir Rab • Paper ID 111: Exploring the Impact of Feature Selection on Non-Stationary Intrusion Detection Models in IoT Networks Authors: Muaan Ur Rehman, Hayretudin Bahsi, Rajesh Kalakoti • Paper ID 121: Semantic and Graph-Based Unsupervised Learning for Insider Threat Detection Using User Activity Sequences Authors: Neda Moghadam, Christopher Neal, Sara Imene.Boucetta, Frederic Cuppens, Nora Boulahia-Cuppens

27 AUGUST 2025, 14:00 – 15:40
Online Session OS2: Privacy and Data Protection
Room: Chancellor's Room
Chair: Mohammad Jafari Dehkordi

- **Paper ID 15:** A Model-Agnostic Framework for Privacy Risk Assessment of Machine Learning Models
Authors: Le Wang, Sonal Allana, Xiaowei Sun, Liang Xue, Xiaodong Lin, Rozita Dara, Pulei Xiong
- **Paper ID 60:** Balancing Trade-offs: Adaptive Differential Privacy in Interpretable Machine Learning Models
Authors: Farhin Farhad Riya, Shahinul Hoque, Yingyuan Yang, Jinyuan Sun, Olivera Kotevska
- **Paper ID 112:** Analysis of User-Generated Content to Unfold Privacy Concerns with CBDCs
Authors: Arshpreet Singh, Mohamad Sadegh Sangari, Atefeh Mashatan
- **Paper ID 117:** DEDALUS & ICARUS: Image Privacy Classification Systems with Risk Oriented Explanations
Authors: Hugo Rocha De Alba, Esma Aïmeur, Mohamed Loutis, Khulud Alqahtani
- **Paper ID 140:** A Longitudinal Look at GDPR Compliance
Authors: Brian Kim, Yang Cao, K. Suzanne Barber

27 AUGUST 2025, 16:10 – 17:30

Online Session OS3

Room: Chancellor's Room

Chair: Mahdi Rabbani

- **Paper ID 94:** Beyond SSO: Mobile Money Authentication for Inclusive e-Government in Sub-Saharan Africa
Authors: Oluwole Adewusi, Wallace Msagusa, Jean Pierre Imanirumva, Okemawo Obadofin, Jema Ndibwile
- **Paper ID 155:** Assessing Privacy Practices on Ontario Municipal Websites
Authors: Adegboola David Adelabu, Yan Yan, Wenjing Zhang, Sampa Rauti, Ville Leppänen, Zuhairuddin Bhutto, Wenthorpe
- **Paper ID 57:** Per-Attribute Privacy in Large Language Models Using Matrix-Variate Gaussian Mechanism
Authors: Islam Monir, Gabriel Ghinita
- **Paper ID 61:** Trust-Aware Federated Defense Against Data Poisoning in ML-Driven IDS For CAVs
Authors: Mahsa Tavasoli, Abdolhossein Sarrafzadeh penalizing, Ali Karimoddini, Milad Khaleghi, Tienake Phuapaiboon, Amauri Goines, Aiden Harris, Jason Griffith
- **Paper ID 120:** Probing AlphaFold's Input Attack Surface via Red-Teaming
Authors: Tia Pope, Ahmad Patooghy
- **Paper ID 46:** Dynamic Decentralized Social Trust for Financial Inclusion with Regulatory Compliance
Authors: Suzana Moreno, Alessandro Aldini, Seigneur Jean-Marc, Paul-Antoine Bisgambiglia

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28 AUGUST 2025, 10:15 – 11:55
In-Person Session PS5: Authentication and Trust Mechanisms
Room: Aitken Room
Chair: Vikas Chouhan
<ul style="list-style-type: none">• Paper ID 79: "A Dynamic, Context-Aware Trust Model for Distributed Computing Environments" Authors: Divya Bansal, Sabrina Dhalla, Jaspal Kaur Saini• Paper ID 129: Stateless Decentralized Authentication Using Segmented ZKPs for Microservices Architectures Authors: Vinh Quach, Ram Dantu, Sirisha Talapuru, Apurba Pokharel, Shakila Zaman• Paper ID 139: Verify All: Establish Bidirectional and Provable Trustworthiness in Microservices Architecture Authors: Vinh Quach, Ram Dantu, Sirisha Talapuru, Indravadan Patel, Alexis Blackwell• Paper ID 157: Formal Specification and Verification of Protection in Transit (PIT) Protocol Using UPPAAL Authors: Takwa Rhaimi, Hamed Aghayarzadeh, Rakesh Podder, Indrakshi Ray

28 AUGUST 2025, 10:15 – 11:55
In-Person Session PS6: Federated Learning and Privacy Techniques
Room: J. Harper Kent Auditorium
Chair: Mahdi Rabbani
<ul style="list-style-type: none">• Paper ID 10: Multilingual Phishing Email Detection Using Lightweight Federated Learning Authors: Dakota Staples, Hung Cao, Saqib Hakak, Paul Cook• Paper ID 24: Privacy Preservation with Noise in Explainable AI Authors: Sonal Allana, Rozita Dara• Paper ID 45: An Efficient and Privacy-Preserving AdaBoost Federated Learning Framework for AiP System Authors: Zhuliang Jia, Rongxing Lu, Mohammad Mamun, Suprio Ray• Paper ID 65: SynQP: A Framework and Metrics for Evaluating the Quality and Privacy Risk of Synthetic Data Authors: Bing Hu, Yixin Li, Asma Bahamyirou, Helen Chen

28 AUGUST 2025, 10:15 – 11:55
Online Session OS4: Authentication and Access Control
Room: Chancellor's Room
Chair: Mohammad Jafari Dehkordi
<ul style="list-style-type: none">• Paper ID 125: Short Training Techniques to Enhance Usability of System-Assigned PINs Authors: Israt Jui, Amirali Salehi-Abari, Julie Thorpe• Paper ID 148: Securing Multi-Domain Systems: Intelligent ABAC Policy Learning for Cross-Domain Access Control Authors: Asmita Biswas, Barsha Mitra, Iqbal Gondal, Qiang Fu

- **Paper ID 153:** Enhancing Visual Speaker Authentication using Dynamic Lip Movement and Meta-Learning
Authors: Pooja Pathare, Garima Bajwa
- **Paper ID 144:** Detecting Deepfakes using Temporal Consistency of Facial Expression Transitions
Authors: Renjith Eettickal Chacko, Garima Bajwa
- **Paper ID 53:** Toward a Lexicon for Privacy, Security, and Trust: Analysing Digital Identity in Media using NLP
Authors: Matthew Comb, Andrew Martin

28 AUGUST 2025, 13:00 – 14:40

In-Person Session PS7: Deception Detection and Fact-Checking

Room: Aitken Room

Chair: Hossein Shokouhinejad

- **Paper ID 37:** FactCellar: An Evidence-based Dataset for Automated Fact-Checking
Authors: Arbaaz Dharmavaram, Farrukh Bin Rashid, Saqib Hakak
- **Paper ID 38:** An Intelligent Framework for Deceptive Review Detection Using Advanced Trust Vector Modeling
Authors: Lily Dey, Md Shopon, Marina L Gavrilova
- **Paper ID 88:** From Birthday Cheers to Privacy Fears: Unraveling the Paradox of Social Media Celebrations in Nigeria
Authors: Victor Yisa, Rita Orji
- **Paper ID 124:** LAID: Lightweight AI-Generated Image Detection in Spatial and Spectral Domains
Authors: Nicholas Chivaran, Jianbing Ni
- **Paper ID 132:** Comparing Macro and Micro Approaches for Detecting Phishing Where It Spreads
Authors: Mina Erfan, Paula Branco, Guy-Vincent Jourdan

28 AUGUST 2025, 13:00 – 14:40

In-Person Session PS8: Secure Infrastructure and Access Control

Room: J. Harper Kent Auditorium

Chair: Mohammad Jafari Dehkordi

- **Paper ID 64:** RF-RADS: A Robust Framework for Risk Assessment in Digital Substations
Authors: Mahdi Abrishami, Kwasi Boakye-Boateng, Hossein Shokouhinejad, Emmanuel Dana Buedi, Kishore Sreedharan, Shabnam Sadari Oskouei
- **Paper ID 76:** Houdini: Benchmarking Container Security Confinement
Authors: Huzaifa Patel, David Barrera, Anil Somayaji
- **Paper ID 104:** No Safety in Numbers: Traffic Analysis of Sealed-Sender Groups in Signal
Authors: Eric Brigham, Nicholas Hopper

28 AUGUST 2025, 13:00 – 14:40
Online Session OS5: Cryptographic Methods and Security
Room: Chancellor’s Room
Chair: Vikas Chouhan
<ul style="list-style-type: none"> • Paper ID 68: Quantum Computing Threats to Management and Operational Safeguards of IEC 62351 Authors: Brian Goncalves, Arash Mahari, Atefeh Mashatan, Reza Arani, Marthe Kassouf • Paper ID 82: A Machine Learning-Based Framework for Assessing Cryptographic Indistinguishability of Lightweight Block Ciphers Authors: Jimmy Dani, Kalyan Nakka, Nitesh Saxena • Paper ID 87: Encryption Struggles Persist: When Tech-Savvy Students Face Challenges with PGP in Thunderbird Authors: Md Imanul Huq, Ahmed Tanvir Mahdad, Nitesh Saxena • Paper ID 119: GPU-Optimized Piecewise Linear Activations for Efficient and Secure Neural Networks Authors: Hiba Guerrouache, Menat Allah Fadoua Slama, Yacine Challal, Karima Benatchba • Paper ID 145: Secret Sharing in 5G-MEC: Applicability for joint Security and Dependability Authors: Thilina Pathirana, Ruxandra F. Olimid

28 AUGUST 2025, 15:10 – 16:30
In-Person Session PS9: Network Security and Adversarial Attacks
Room: Aitken Room
Chair: Hossein Shokouhinejad
<ul style="list-style-type: none"> • Paper ID 36: RefPentester: A Knowledge-Informed Self-Reflective Penetration Testing Framework based on Large Language Models Authors: Hanzheng Dai, Yuanliang Li, Jun Yan, Zhibo Zhang • Paper ID 86: DNS Profiler: Quantifying User Browsing Risk from DNS Traffic Patterns Authors: Mahdi Firoozjaei, Yaser Baseri, Qing Tan • Paper ID 48: FragmentFool: Fragment-based Adversarial Perturbation for Graph Neural Network-based Vulnerability Detection Authors: Muhammad Fakhrur Rozi, Tao Ban, Seiichi Ozawa, Hiroaki Inoue, Takeshi Takahashi, Sajaad Dadkah • Paper ID 156: Identifying and Addressing User-level Security Concerns in Smart Homes Using “Smaller” LLMs Authors: Hafijul Hoque Chowdhury, Riad Ahmed Anonto, Sourov Jajodia, Suryadipta Majumdar, Md. Shohrab Hossain

28 AUGUST 2025, 15:10 – 16:30

Online Session OS6: Trust and Verification

Room: Chancellor's Room

Chair: Mahdi Rabbani

- **Paper ID 16:** TrollSleuth: Behavioral and Linguistic Fingerprinting of State-Sponsored Trolls
Authors: Havva Alizadeh Noughabi, Fattane Zarrinkalam, Abbas Yazdinejad, Ali Dehghantanha
- **Paper ID 71:** Temporal-Spatial Feature Modification Attacks Against Machine Learning-Based Network Intrusion Detection Systems
Authors: Eeshan Walia, Sohini Pillay, Christopher Yoeurng, Dongfeng Fang, Shengjie Xu
- **Paper ID 80:** G-STAR: A Threat Modeling Framework for General-Purpose AI Systems
Authors: Pulei Xiong, Saeedeh Lohrasbi, Prini Kotian, Scott Buffett
- **Paper ID 103:** A Modeling and Static Analysis Approach for the Verification of Privacy and Safety Properties in Kotlin Android Apps
Authors: Bara Nazzal, James Cordy, Manar Alalfi
- **Paper ID 131:** An Integer Programming Framework for ReBAC Policy Mining and Optimized Conformance Testing
Authors: Padmavathi Iyer
- **Paper ID 122:** Detecting Ransomware Before It Bites: A Hybrid Model Approach for Early Ransomware Detection
Authors: Sk Mahtab Uddin, Saqib Hakak, Miguel Garzón