

13th EAI International Conference on Digital Forensics & Cyber Crime

16-18 November 2022

Holiday Inn Express Boston
69 Boston Street,
Boston, MA 02125,USA

Day 1: Wed, 16 Nov 2022

08:00	08:30	Registration
08:30	10:00	Workshops: Session I
10:00	10:30	Coffee break / Networking
10:30	12:00	Workshops: Session II
12:00	13:00	Lunch on your own
13:00	14:30	Workshops Session III
14:30	15:00	Coffee break / Networking
15:00	16:30	Workshops Session IV

Track1 (Room: TBC)

Remote Digital Forensics with Bitscout (Vitaly Kamluk)

Password Cracking and Rainbow Tables (Part 1)

Password Cracking and Rainbow Tables (Part 2)

Day 2: Thursday, 17th Nov 2022

Time		Track 1 (Room: TBC)	Track 2 (Room: Kennedy TBC)
08:00	08:45	Registration	
08:45	09:00	Announcements	
09:00	10:00	Keynote by Lee Sult	
10:00	10:30	Coffee break / Networking	
10:30	12:00	Session "Image and AI Forensics"	Session "Intrusion and Malware detection I"
		<p><i>Image-to-Image Translation Generative Adversarial Networks for Video Source Camera Falsification</i> Veksler, Maryna (Florida International University); Caspard, Clara (Pomona College); Akkaya, Kemal (Florida International University)</p> <p><i>Towards efficient on-site CSAM triage by clustering images from a source point of view</i> Klier, Samantha; Baier, Harald (Universität der Bundeswehr München, Informatik, FI CODE)</p> <p><i>Can Image Watermarking Efficiently Protect Deep-Learning-Based Image Classifiers? -- A Preliminary Security Analysis of an IP-Protecting Method</i> Xie, Jia-Hui; Wu, Di; Zhang, Bo-Hao; Su, Hai; Yang, Huan (South China Normal University)</p> <p><i>Poisoning-Attack Detection using an Auto-Encoder for Deep Learning Models</i> Elmoadine, Anass; Coatrieux, Gouenou; Bellafqira, Reda (IMT Atlantique)</p>	<p><i>MQTT Traffic Collection and Forensic Analysis Framework</i> Chan, Ching Bon; Yan, Wye Kaye; Ma, Jung Man; Loh, Kai Mun; Chen, Greger; Low, Malcolm (Singapore Institute of Technology); Rehman, Habib; Phua, Thong Chee (Firefish Communications)</p> <p><i>IoT Malicious Traffic Detection Based on FSKDE and Federated DIOT-Pysyft</i> Zhang, Ke; Zhang, Guang Hua (Hebei University of Science and Technology); Chen, Zhen Guo (Hebei Province Internet of Things Monitoring Engineering Technology Research Center); Zuo, Xiao Jun (State Grid Hebei Electric Power Research Institute)</p> <p><i>The Lightweight Botnet Detection Model Based on the Improved UNet</i> Li, Chengjie; Zhang, Yunchun; Li, Zixuan; Cui, Xiaohui; Liao, Zikun; Feng, Fan (School of Software, Yunnan University; Research Center of Cyberspace, Yunnan University)</p>

			<p><i>Volatility Custom Profiling for Automated Hybrid ELF Malware Detection</i> Varshney, Rahul; Kumar, Nitesh (C3i Center, Indian Institute of Technology Kanpur); Handa, Anand; Shukla, Sandeep (Indian Institute of Technology Kanpur)</p>
12:30	13:30	Lunch on your own	
13:30	14:30	Session "Digital Forensic Tools"	Session "Authentication"
		<p><i>Automating the Flow of Data Between Digital Forensic Tools using Apache NiFi</i> Du, Xiaoyu; Nwebonyi, Francis N; Gladyshev, Pavel (University College Dublin)</p> <p><i>Digital Forensics Tool Evaluation on Deleted Files</i> Khan, Tahir; Stankovic', Miloš (Purdue University)</p>	<p><i>Universal Key to Authentication Authority with Human-Computable OTP Generator</i> matelski, Slawomir (INTELCO LLC)</p> <p><i>The Need for Biometric Anti-Spoofing Policies: The Case of Etsy</i> Jozani, Mohsen (Augusta University); Zanella, Gianluca (University of Texas at San Antonio); Khanov, Maxium (University of Wisconsin Madison); Dorai, Gokila (Augusta University); Akbas, Esra (Georgia State University)</p>

14:30	15:30	Coffee break	
15:30	17:00	Session "Mobile Forensics"	Session "Intrusion and Malware detection II"
		<p><i>Forensic Analysis of Webex on the iOS Platform</i>Zhou, Jiaxuan; Karabiyik, Umit (Purdue University) <i>Watch Your WeChat Wallet: Digital Forensics Approach on WeChat Payments on Android</i>Zhou, Jiaxuan; Karabiyik, Umit (Purdue University) <i>Crypto Wallet Artifact Detection on Android Devices using Advanced Machine Learning Techniques</i>Bhattarai, Abhishek; Veksler, Maryna; Sahin, Hadi; Kurt, Ahmet; Akkaya, Kemal (Florida International University)</p>	<p><i>On the application of active learning to handle data evolution in Android malware detection</i>Guerra Manzanares, Alejandro; Bahsi, Hayretdin (Tallinn University of Technology) <i>Deep Learning-based Detection of Cyberattacks in Software-Defined Networks</i>Mirsadeghi, Seyed Mohammad Hadi; Bahsi, Hayretdin (Tallinn University of Technology); Inbouli, Wissem (Laboratoire lorrain de recherche en informatique et ses applications) <i>Deep Learning Based Network Intrusion Detection System for Resource-Constrained Environments</i>Rizvi, Syed (South East Technological University, Waterford, Ireland); Scanlon, Mark (University College Dublin); McGibney, Jimmy; Sheppard, John (South East Technological University, Waterford, Ireland)</p>
19:00:00	21:00:00	Gala dinner (location to be confirmed)	

Day 3: Friday, 18th Nov 2022

Time		Track 1 (Room: TBC)	Track 2 (Room: TBC)
08:30	09:00	Registration	
10:30	10:00	Session "Cybercrime 1"	Session "Security and Privacy"
		<p><i>Transformer-based comparative multi-view illegal transaction detection Extracting Spread-Spectrum Hidden Data Based on Better Lattice Decoding</i> Yang, Fan; Cheng, Hao; Lyu, Shanxiang (Jinan University) Zhong, Meiling; Wang, Yong; Yan, Jingke (Guilin University of Electronic Technology); Cheng, Yao (Southwest Jiaotong University); Sun, Peihao (Chinese Academy of Agricultural Sciences)</p> <p><i>CSCD: A Cyber Security Community Detection Scheme on Online Social Networks</i> Zeng, Yutong; Yu, Honghao (Sichuan University); Wu, Tiejun (NSFOCUS Technologies Group Co Ltd); Chen, Yong (Sichuan University); Lan, Xing (NSFOCUS Technologies Group Co Ltd); Huang, Cheng (Sichuan University)</p> <p><i>Electronic Evidence in the Indian Courts: An update for the global Cyber Forensic Experts</i> Bhattathiripad, Dr. Vinod (G J Software Forensics); Behera, Loknath (Indian Police Service)</p> <p><i>Crime and Incident Watch for Smart Cities: A Sensor-Based Approach</i></p>	<p><i>APPFed: A Hybrid Privacy-Preserving Framework for Federated Learning over Sensitive Data</i> Yao, Ruichu; Tang, Kunsheng; Fan, BingBing (South China Normal University)</p> <p><i>Attribute-based Proxy Re-encryption with Privacy Protection for Message Dissemination in VANET</i> Liu, Qiuming; Yao, Zhexin; Wu, Zhen; Xu, Zeyao (Jiangxi university of science and technology)</p> <p><i>A General Steganalysis Method of QR Codes</i> Chen, Jia; Chen, Kunlin; Wang, Yongjie; Yan, Xuehu; Li, Longlong (National University of Defense Technology)</p> <p><i>Extracting Spread-Spectrum Hidden Data Based on Better Lattice Decoding</i> Yang, Fan; Cheng, Hao; Lyu, Shanxiang (Jinan University)</p>

		Nwebonyi, Francis N.; Du, Xiaoyu; Gladyshev, Pavel (University College Dublin)	
12:30	13:30	Lunch on your own	
13:30	15:00	Session "Cybercrime 2"	Session "Security Risk Assessment"
		<p><i>Cyber Crime undermines Data Privacy efforts -- On the Balance between Data Privacy and Security</i> Mundt, Michael (Esri Deutschland GmbH); Baier, Harald (Bundeswehr University Munich)</p> <p><i>Shedding Light on Monopoly: Temporal Analysis of Trades</i> Dolejška, Daniel; Veselý, Vladimír; Pluskal, Jan; Koutenský, Michal (Faculty of Information Technology, Brno University of Technology)</p> <p><i>It's All Connected: Detecting Phishing Transaction</i></p>	<p><i>Android-Based Mobile Terminal Security Assessment</i> Hu, Zhiyuan; Shi, Linghang; Chen, Huijun; Lu, Jinghui (vivo Mobile Communication Co., Ltd.)</p> <p><i>VPnet: A Vulnerability Prioritization Approach Using Pointer Network and Deep Reinforcement Learning</i> Sheng, Zhoushi; Yu, Bo; Liang, Chen; Zhang, Yongyi (National University of Defense Technology)</p> <p><i>Are External Auditors Capable of Dealing with Cybersecurity Risks?</i></p>

		<i>Records on Ethereum Using Link Prediction</i> Opara, Chidimma; Chen, Yingke (Teesside University); Wei, Bo (Northumbria University)	Li, Yueqi; Goel, Sanjay; Williams, Kevin (University at Albany, State University of New York)
15:00	15:15	Conference wrap-up	