2024 Conference on Building a Secure & Empowered Cyberspace (BuildSEC 2024)

Delhi, India 19-20 December 2024



IEEE Catalog Number: CFP241A8-POD ISBN:

979-8-3315-1673-4

Copyright © 2024 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

*** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP241A8-POD

 ISBN (Print-On-Demand):
 979-8-3315-1673-4

 ISBN (Online):
 979-8-3315-1672-7

Additional Copies of This Publication Are Available From:

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



2024 Conference on Building a Secure & Empowered Cyberspace (BuildSEC) **BuildSEC 2024**

Table of Contents

Message from General Chairs	vii
Message from Program Chairs	vii
Organizing Committee	ix
Program Committee	
Technical Program Committee	xv
Keynote	xviii
Sponsors	xix
Cyberphysical Systems and Machine Learning	
Privacy-Preserving Data Provenance for Smart Meter Communications	
Rohini Poolat Pārameswarath (National University of Singapore,	-
Singapore) and Biplab Sikdar (National University of Singapore,	
Singapore)	
Entailment-Driven Privacy Policy Classification with LLMs	8
Bhanuka Silva (The University of Sydney, Australia), Dishanika	
Denipitiyage (The University of Sydney, Australia), Suranga	
Seneviratne (The University of Sydney, Australia), Anirban Mahanti	
(The University of Sydney, Australia), and Aruna Seneviratne	
(University of New South Wales, Australia)	
iCamInspector: Classify Video Traffic and Detect IoT (Spy) Camera Flows	16
Priyanka Rushikesh Chaudhary (CSIS, BITS Pilani, India), Jabez	IC
Christopher (CSIS, BITS Pilani, India), and Rajib Ranjan Maiti (CSIS,	
BITS Pilani, India)	
	_
Patch-Based Adversarial Attack Against DNNs	24
Nemichand Rinwa (Indian Institute of Technology Patna, India), Harsh	
Kasyap (Indian Institute of Technology Patna, India), and Somanath	
Tripathy (Indian Institute of Technology Patna, India)	
Blockchain and Organisational Security	
SoK: Payment Channel Networks	28
Kartick Kolachala (New Mexico State University, USA), Mohammed Ababneh	
(New Mexico State University, USA), and Roopa Vishwanathan (New Mexico State University, USA)	
Since Aniversity, ASA)	

Author Index	87
Evaluating Privacy Measures in Healthcare Apps Predominantly Used by Older Adults	79
Design of Secure, Privacy-focused, and Accessible E-Payment Applications for Older Adults Sanchari Das (University of Denver, USA; George Mason University, USA)	74
Mason University, USA) Online Authentication Habits of Indian Users	66
Exploring Older Adults' Perceptions and Experiences with Online Dating Muskan Fatima (University of Denver, USA), Naheem Noah (University of Denver, USA), and Sanchari Das (University of Denver, USA; George	57
(RWTH Aachen University, Germany), and Klaus Wehrle (RWTH Aachen University, Germany) Privacy and Usability	
Complementing Organizational Security in Data Ecosystems with Technical Guarantees	49
SmartAgroChain: Revolutionizing Agricultural Supply Chains with Blockchain Technology Shuvro Sarker (United International University, Bangladesh), Mobashera Israq (United International University, Bangladesh), Labib Abdal (United International University, Bangladesh), Umma Hani Mim (United International University, Bangladesh), Nahian Sourov (United International University, Bangladesh), and Salekul Islam (North South University, Bangladesh)	41
Protection Against Person-Identification from EEG Patterns: A Blockchain-Based Approach Susmita Mondal (Indian Institute of Technology, Jodhpur), Pankaj Pandey (Indian Institute of Technology, Gandhinagar), Krishna Prasad Miyapuram (Indian Institute of Technology, Gandhinagar), and Suchetana Chakraborty (Indian Institute of Technology, Jodhpur)	50