



# **CLOUD COMPUTING 2024**

The Fifteenth International Conference on Cloud Computing, GRIDs, and  
Virtualization

April 14 - 18, 2024

Venice, Italy

## **CLOUD COMPUTING 2024 Editors**

Andreas Aßmuth, Ostbayerische Technische Hochschule Amberg-Weiden,  
Germany

Sebastian Fischer, Ostbayerische Technische Hochschule Regensburg, Germany

Christoph P. Neumann, Ostbayerische Technische Hochschule Amberg-Weiden,  
Germany

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571

**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2024) by International Academy, Research, and Industry Association (IARIA)  
Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2024)

International Academy, Research, and Industry Association (IARIA)  
412 Derby Way  
Wilmington, DE 19810

Phone: (408) 893-6407  
Fax: (408) 527-6351

[petre@iaria.org](mailto:petre@iaria.org)

**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  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

## Table of Contents

Towards Multi-Domain Multi-Tenant Situational Awareness Systems <i>Tobias Eggendorfer and Gerhard A. Schwarz</i>	1
Distinguishing Tor From Other Encrypted Network Traffic Through Character Analysis <i>Pitpimon Choorod, Tobias J. Bauer, and Andreas Assmuth</i>	8
Automated Vulnerability Scanner for the Cyber Resilience Act <i>Sandro Falter, Gerald Brukh, Max Wess, and Sebastian Fischer</i>	13
Vocabulary Attack to Hijack Large Language Model Applications <i>Patrick Levi and Christoph P. Neumann</i>	19
Task Offloading in Fog Computing with Deep Reinforcement Learning: Future Research Directions Based on Security and Efficiency Enhancements <i>Amir Pakmehr</i>	25
MANTRA: Towards a Conceptual Framework for Elevating Cybersecurity Applications Through Privacy-Preserving Cyber Threat Intelligence Sharing <i>Philipp Fuxen, Murad Hachani, Rudolf Hackenberg, and Mirko Ross</i>	34
A Forensic Approach to Handle Autonomous Transportation Incidents within Gaia-X <i>Liron Ahmeti, Klara Dolos, Conrad Meyer, Andreas Attenberger, and Rudolf Hackenberg</i>	42
Revolutionizing System Reliability: The Role of AI in Predictive Maintenance Strategies <i>Michael Bidollahkhani and Julian Kunkel</i>	49