

# **2022 IEEE Symposium on Visualization for Cyber Security (VizSec 2022)**

**Oklahoma City, Oklahoma, USA  
19 October 2022**



**IEEE Catalog Number: CFP2261I-POD  
ISBN: 978-1-6654-6149-8**

**Copyright © 2022 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:	CFP22611-POD
ISBN (Print-On-Demand):	978-1-6654-6149-8
ISBN (Online):	978-1-6654-6148-1
ISSN:	2639-4359

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

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

# 2022 IEEE Symposium on Visualization for Cyber Security (VizSec)

## Table of Contents

<i>iii</i>	Foreword
<i>iv</i>	Committees
<i>vi</i>	Sponsors

## Keynote

<i>K-1</i>	Beyond Vis(Sec): Emerging Trends in Data Science for Cybersecurity <i>Jordan Crouser, Smith College</i>
------------	--

## Technical Papers

<i>P-1</i>	Analysis of the Design Space for Cybersecurity Visualizations in VizSec.....1 <i>Adrian Komadina, Željka Mihajlović, Stjepan Groš</i>
<i>P-2</i>	Visualization Of Class Activation Maps To Explain AI Classification Of Network Packet Captures.....12 <i>Igor Cherepanov, Alex Ulmer, Jonathan Gerald Joewono, Jörn Kohlhammer</i>
<i>P-3</i>	Portola: A Hybrid Tree and Network Visualization Technique for Network Segmentation.....23 <i>Kuhu Gupta, Aditeya Pandey, Larry Chan, Ambika Yadav, Brian Staats, Michelle A. Borkin</i>
<i>P-4</i>	PRIVEE: A Visual Analytic Workflow for Proactive Privacy Risk Inspection of Open Data.....28 <i>Kaustav Bhattacharjee, Akm Zahirul Islam, Jaideep Vaidya, Aritra Dasgupta</i>
<i>P-5</i>	Visual Firewall Log Analysis - At the Border Between Analytical and Appealing.....39  <i>Marija Schufrin, Hendrik Lücke-Tieke, Jörn Kohlhammer</i>

## Closing Panel

<i>C-1</i>	Translating Real Needs for Cyber Operators into Impactful R&D.....N/A <i>Sanchari Das, Kami Vaniea, Prashanth Rajivan, Josiah Dykstra, Glenn Fink and Vince Mancuso</i>
------------	--