

Robert Krimmer · Melanie Volkamer ·
Bernhard Beckert · Ralf Küsters ·
Oksana Kulyk · David Duenas-Cid ·
Mikhel Solvak (Eds.)

Electronic Voting

5th International Joint Conference, E-Vote-ID 2020
Bregenz, Austria, October 6–9, 2020
Proceedings

Editors

Robert Krimmer 
Tallinn University of Technology
Tallinn, Estonia

Tartu University
Tartu, Estonia

Bernhard Beckert 
Karlsruhe Institute of Technology (KIT)
Karlsruhe, Baden-Württemberg, Germany

Oksana Kulyk
University of Copenhagen
Copenhagen, Denmark

Mihkel Solvak
University of Tartu
Tartu, Estonia

Melanie Volkamer 
Karlsruhe Institute of Technology
Karlsruhe, Baden-Württemberg, Germany

Ralf Küsters
University of Stuttgart
Stuttgart, Germany

David Duenas-Cid 
Tallinn University of Technology
Tallinn, Estonia

Kozminski University
Warsaw, Poland

ISSN 0302-9743 ISSN 1611-3349 (electronic)
Lecture Notes in Computer Science
ISBN 978-3-030-60346-5 ISBN 978-3-030-60347-2 (eBook)
<https://doi.org/10.1007/978-3-030-60347-2>

LNCS Sublibrary: SL4 – Security and Cryptology

© Springer Nature Switzerland AG 2020

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed.

The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Contents

Shifting the Balance-of-Power in STV Elections	1
<i>Michelle Blom, Andrew Conway, Peter J. Stuckey, and Vanessa J. Teague</i>	
Random Errors Are Not Necessarily Politically Neutral	19
<i>Michelle Blom, Andrew Conway, Peter J. Stuckey, Vanessa J. Teague, and Damjan Vukcevic</i>	
Tripped at the Finishing Line: The Åland Islands Internet Voting Project. . . .	36
<i>David Duenas-Cid, Iuliia Krivonosova, Radu Serrano, Marlon Freire, and Robert Krimmer</i>	
Revisiting Practical and Usable Coercion-Resistant Remote E-Voting	50
<i>Ehsan Estaji, Thomas Haines, Kristian Gjølsteen, Peter B. Rønne, Peter Y. A. Ryan, and Najmeh Soroush</i>	
Privacy-Preserving Dispute Resolution in the Improved Bingo Voting	67
<i>Rosario Giustolisi and Alessandro Bruni</i>	
Bayesian Audits Are Average But Risk-Limiting Audits are Above Average.	84
<i>Amanda K. Glazer, Jacob V. Spertus, and Philip B. Stark</i>	
CHVote: Sixteen Best Practices and Lessons Learned	95
<i>Rolf Haenni, Eric Dubuis, Reto E. Koenig, and Philipp Locher</i>	
A Unified Evaluation of Two-Candidate Ballot-Polling Election Auditing Methods.	112
<i>Zhuoqun Huang, Ronald L. Rivest, Philip B. Stark, Vanessa J. Teague, and Damjan Vukcevic</i>	
Towards Model Checking of Voting Protocols in UPPAAL.	129
<i>Wojciech Jamroga, Yan Kim, Damian Kurpiewski, and Peter Y. A. Ryan</i>	
E-Voting System Evaluation Based on the Council of Europe Recommendations: nVotes	147
<i>David Yeregui Marcos del Blanco, David Duenas-Cid, and Héctor Aláiz Moretón</i>	
My Vote, My (Personal) Data: Remote Electronic Voting and the General Data Protection Regulation.	167
<i>Adrià Rodríguez-Pérez</i>	

The Oxymoron of the Internet Voting in Illiberal and Hybrid Political Contexts	183
<i>Bogdan Romanov and Yury Kabanov</i>	
Effective Cybersecurity Awareness Training for Election Officials.	196
<i>Carsten Schürmann, Lisa Hartmann Jensen, and Rósa María Sigbjörnsdóttir</i>	
Does Vote Verification Work: Usage and Impact of Confidence Building Technology in Internet Voting	213
<i>Mihkel Solvak</i>	
Author Index	229

