

12th International Workshop on Theory and Practice of Provenance (TaPP'20)

Online
22 June 2020

ISBN: 978-1-7138-1530-3

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© (2020) by Usenix Association
All rights reserved.

Printed with permission by Curran Associates, Inc. (2020)

For permission requests, please contact Usenix Association
at the address below.

Usenix Association
2560 Ninth Street, Suite 215
Berkeley, California, 94710

<https://www.usenix.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
Web: www.proceedings.com

TABLE OF CONTENTS

A FIRST-PRINCIPLES ALGEBRAIC APPROACH TO DATA TRANSFORMATIONS IN DATA CLEANING: UNDERSTANDING PROVENANCE FROM THE GROUND UP.....	1
<i>Santiago Núñez-Corrales, Lan Li, Bertram Ludäscher</i>	
DATA PROVENANCE FOR ATTRIBUTES: ATTRIBUTE LINEAGE.....	12
<i>Dennis Dosso, Susan B. Davidson, Gianmaria Silvello</i>	
EFFICIENT PROVENANCE ALIGNMENT IN REPRODUCED EXECUTIONS	19
<i>Yuta Nakamura, Tanu Malik, Ashish Gehani</i>	
A GENERIC EXPLAINABILITY FRAMEWORK FOR FUNCTION CIRCUITS	26
<i>Sylvain Hallé, Hugo Tremblay</i>	
INTEGRITY CHECKING AND ABNORMALITY DETECTION OF PROVENANCE RECORDS	31
<i>Sheung Chi Chan, Ashish Gehani, Hassaan Irshad, James Cheney</i>	
DISCREPANCY DETECTION IN WHOLE NETWORK PROVENANCE	37
<i>Raza Ahmad, Eunjin Jung, Carolina de Senne Garcia, Hassaan Irshad, Ashish Gehani</i>	
PROVENANCE-BASED INTERPRETATION OF MULTI-AGENT INFORMATION ANALYSIS	43
<i>Scott Friedman, Jeff Rye, David LaVergne, Dan Thomsen, Matthew Allen, Kyle Tunis</i>	

Author Index