35th International Conference on Computer Applications in Industry and Engineering (CAINE 2022)

EPiC Series in Computing Volume 89

Online 17 – 19 October 2022

Editors:

Yan Shi Gongzhu Hu Krishna Kambhampaty Takaaki Goto

ISBN: 978-1-7138-6812-5

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© (2022) by the International Society for Computers and Their Applications All rights reserved. Reproduction in any form without the written consent of ISCA is prohibited.

Printed with permission by Curran Associates, Inc. (2023)

For permission requests, please contact the International Society for Computers and Their Applications at the address below.

International Society for Computers and Their Applications 64 White Oak Court Winona, MN 55987 USA

Phone: (507) 458-4517

isca@ipass.net

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 Bucket-Based Data Pre-Processing Method for Encrypted Video Detection	1
Waleed Afandi, Syed Muhammad Ammar Hassan Bukhari, Muhammad Usman Shahid Khan, Tahir Maqsood, Samee U. Khan	
A Measurement Strategy for Business Processes in Digital Transformation	11
Narayan Debnath, Carlos Humberto Salgado, Mario Gabriel Peralta, Daniel Riesco, Lorena Baigorria, Germán Montejano, Mouna Mazzi	
Mutation Event and Fuzzy Active Rule Processing in a Graph Database System	21
Development of a Prototype for a Process Support and Analysis Platform for Small and Medium-Sized Enterprises	31
Jonas Kallisch, Christoph Wunck	
Deep Reinforcement Learning for Portfolio Management	41
Accelerating Pipeline Implementation of Dynamic Programming on GPU	52
Efficient Secured Public-Key Based Data Lookup and Multicast Protocols with Anonymity in RC-Based Two-Level Hierarchical Structured P2P Network	62
Building a Distributed System for Live Virtual Machine Introspection	72
Multi-Agent Polygon Formation Via Circle Formation	81
Author Index	