



# **SOTICS 2023**

The Thirteenth International Conference on Social Media Technologies,  
Communication, and Informatics

November 13th – 17th, 2023

Valencia, Spain

## **SOTICS 2023 Editors**

Jose Miguel Jimenez, Universitat Politecnica de Valencia, Spain

**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© (2023) 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

Stock Price Prediction Based on Investor Sentiment Using BERT and Transformer Models <i>Chien-Cheng Lee and Anish Sah</i>	1
From Unstructured Data to Digital Twins: From Tweets to Structured Knowledge <i>Sergej Schultenkamper, Frederik Simon Baumer, Yeong Su Lee, and Michaela Geierhos</i>	6
Emoji Trends Between Abnormal Usage and Cultural Differences: A Case Study of Emojis <i>Ahmed Almohanadi and Shohei Tokyo Yokoyama</i>	12