## 13th International Defence and Homeland Security Simulation Workshop (DHSS 2023)

Held at the 20th International Multidisciplinary Modeling and Simulation Multiconference (I3M 2023)

Athens, Greece 18-20 September 2023

**Editors:** 

Agostino G. Bruzzone Benjamin Goldberg Francesco Longo

ISBN: 978-1-7138-8018-9

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.

This work is licensed under a Creative Commons Attribution 4.0 International License. License details: http://creativecommons.org/licenses/by-nc-nd/4.0/.

No changes have been made to the content of these proceedings. There may be changes to pagination, and minor adjustments for aesthetics.

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

For permission requests, please contact CAL-TEK S.r.l. at the address below.

CAL-TEK S.r.l. Via Umberto Nobile 80 87036 Rende (CS) Italy

Phone: +39 333 7042 612 Fax: +39 0984 937849

info@cal-tek.eu

## 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

## <u>Index</u>

Frosolini

Nonstationary Continuum-Armed Bandit Strategies for Automated Trading in a Simulated Financial Market B. Liu, J. Cartlidge	1
The Rover Module for emergency management: A technical description, crowd simulation, and battery test D. Reed, J. Hurter, D. Dodge, A. Mompoint, T. Hillyer	11
Container terminal simulation for vulnerability assessment S. Gote, A.Gabriel, F. Sill Torres	21
Analysis of massive crowd dynamics during special events: 2026 FIFA World Cup as a case study M.B. Alamilla, A.H. Barrientos, A.E.V. Morales	29
Simulation as a decision support tool for airport land use developments L.E García Rosado, A.G. Wellens, C. Zúñiga Alcaráz	39
Minimizing operating failure attention times in the STC Metro: case of study of the optimal location of workshops C. Magali Ochoa Morán, A.E.V Morales, A. Huerta Barrientos	47
<b>Demand analysis for failure prediction for decision making in the STC Metro</b> A. Vilchis Serrano, A.E.V Morales, A. Huerta Barrientos	55
Strategic Engineering for Decision Making during Urban Crises A.G. Bruzzone, M. Gotelli, A. Giovannetti, A. De Paoli, R. Ferrari, M. Pedemonte, A. Martella, A. Reverberi, F. Faccio, L. Cirillo, F. Ghisi, F. Monaci, L. Bucchianica, M.	63