Table of Contents

International Journal of Systems and Software Security and Protection

Volume 9 • Issue 1 • January-March-2018 • ISSN: 2640-4265 • eISSN: 2640-4273 An official publication of the Information Resources Management Association

Special Issue of Secure Software Engineering in DevOps and Agile Development

Guest Editorial Preface

iv Martin Gilje Jaatun, SINTEF Digital, Trondheim / University of Stavanger, Stavanger, Norway

Research Articles

1 Challenges and Solutions for Addressing Software Security in Agile Software Development: A Literature Review and Rigor and Relevance Assessment

Ronald Jabangwe, University of Southern Denmark, Odense M, Denmark Kati Kuusinen, University of Southern Denmark, Odense, Denmark Klaus R Riisom, University of Southern Denmark, Odense, Denmark Martin S Hubel, University of Southern Denmark, Odense, Denmark Hasan M Alradhi, University of Southern Denmark, Odense M, Denmark Niels Bonde Nielsen, University of Southern Denmark, Odense S, Denmark

18 Weaving Security into DevOps Practices in Highly Regulated Environments

Jose Andre Morales, Software Engineering Institute, Carnegie Mellon University, Pittsburgh, USA Hasan Yasar, Software Engineering Institute, Carnegie Mellon University, Pittsburgh, USA Aaron Volkmann, Software Engineering Institute, Carnegie Mellon University, Pittsburgh, USA

47 Fitting Security into Agile Software Development

Kalle Rindell, University of Turku, Turku, Finland Sami Hyrynsalmi, Tampere University of Technology, Pori, Finland Ville Leppänen, University of Turku, Turku, Finland

COPYRIGHT

The International Journal of Systems and Software Security and Protection (IJSSSP) (ISSN 2640-4265; eISSN 2640-4273), Copyright © 2018 IGI Global. All rights, including translation into other languages reserved by the publisher. No part of this journal may be reproduced or used in any form or by any means without written permission from the publisher, except for noncommercial, educational use including classroom teaching purposes. Product or company names used in this journal are for identification purposes only. Inclusion of the names of the products or companies does not indicate a claim of ownership by IGI Global of the trademark or registered trademark. The views expressed in this journal are those of the authors but not necessarily of IGI Global.

The International Journal of Systems and Software Security and Protection is indexed or listed in the following: