Call for Papers

The Journal of Digital Forensics, Security and Law has an open call for papers in, or related to, the following subject areas:

1) Digital Forensics Curriculum
2) Cyber Law Curriculum
3) Information Assurance Curriculum
4) Digital Forensics Teaching Methods
5) Cyber Law Teaching Methods
6) Information Assurance Teaching Methods
7) Digital Forensics Case Studies
8) Cyber Law Case Studies
9) Information Assurance Case Studies
10) Digital Forensics and Information Technology
11) Law and Information Technology
12) Information Assurance and Information Technology

Guide for Submission of Manuscripts

Manuscripts should be submitted through the JDFSL online system in Word format using the following link: http://www.jdfsl.org/for-authors. If the paper has been presented previously at a conference or other professional meeting, this fact, the date, and the sponsoring organization should be given in a footnote on the first page. Articles published in or under consideration for other journals should not be submitted. Enhanced versions of book chapters can be considered. Authors need to seek permission from the book publishers for such publications. Papers awaiting presentation or already presented at conferences must be significantly revised (ideally, taking advantage of feedback received at the conference) in order to receive any consideration. Funding sources should be acknowledged in the Acknowledgements section.

The copyright of all material published in JDFSL is held by the Association of Digital Forensics, Security and Law (ADFSL). The author must complete and return the copyright agreement before publication. The copyright agreement may be found at http://www.jdfsl.org/for-authors.

Additional information regarding the format of submissions may be found on the JDFSL Web site at http://www.jdfsl.org/for-authors.
### Contents

**Call for Papers** ............................................................................................................................ 2  
**Guide for Submission of Manuscripts** .......................................................................................... 2  
**From the Editor-in-Chief** .............................................................................................................. 5  
**Factors Influencing Digital Forensic Investigations: Empirical Evaluation of 12 Years of Dubai Police Cases** ........................................................................................................... 7  
Ibtesam Al Awadhi, Janet C Read, Andrew Marrington and Virginia N. L. Franqueira  
**Tracking and Taxonomy of Cyberlocker Link Sharers Based on Behavior Analysis** .............. 17  
Xiao-Xi Fan and Kam-Pui Chow  
**Data Extraction on MTK-Based Android Mobile Phone Forensics** ........................................ 31  
Joe Kong  
**Cyber Black Box/Event Data Recorder: Legal and Ethical Perspectives and Challenges with Digital Forensics** ......................................................................................................................... 43  
Michael Losavio, Pavel Pastukov and Svetlana Polyakova  
**PLC Forensics Based on Control Program Logic Change Detection Works** ......................... 59  
Ken Yau and Kam-Pui Chow  
**Forensic Acquisition of IMVU: A Case Study** ........................................................................... 69  
Robert van Voorst, M-Tahar Kechadi and Nhien-An Le-Khac  
**Exploring the Use of PLC Debugging Tools for Digital Forensic Investigations on Scada Systems** ................................................................................................................................. 79  
Tina Wu and Jason R.C. Nurse  
**Open Forensic Devices** .............................................................................................................. 97  
Lee Tobin and Pavel Gladyshev  
**The Use of Ontologies in Forensic Analysis of Smartphone Content** ...................................... 105  
Mohammed Alzaabi, Thomas Anthony Martin, Kamal Taha and Andy Jones  
**Project Maelstrom: Forensic Analysis of Bittorrent-Powered Browser** ................................... 115  
Jason Farina, M-Tahar Kechadi and Mark Scanlon  
**Subscription Information** ............................................................................................................. 125
FROM THE EDITOR-IN-CHIEF

Welcome to JDFS L’s last issue for 2015! As usual, I would like to thank our editorial board, reviewers, and the JDFS L team for bringing this issue to life.

I would first like to announce that we have reached an important milestone in our indexing for 2015. JDFS L has been selected for inclusion into the Emerging Sources Citation Index (ESCI) by ISI Web of Science. This is fantastic news that validates the quality of the work being published in JDFS L. It also allows for researchers in countries worldwide that use the Web of Science as their master list of journals to publish in JDFS L. We are very excited and happy to share this news with everyone. Thank you for everyone that has worked with us to achieve this milestone.

In this special Systematic Approaches to Digital Forensic Engineering (SADFE) issue, we continue our multidisciplinary tradition. The papers in this issue cover a multitude of topics and features work by researchers from a number of countries. The themes covered in this issue include: (1) Factors influencing digital forensic investigations, (2) Behavioral analysis, (3) Android forensics, (4) Legal and ethical challenges, (5) Ontologies in digital forensics, (6) Open source forensics, (7) Programmable Logic Controller, (PLC) forensics, (8) Android forensics, (9) Bit-Torrent-Powered browser forensics and (10) Instant Messaging within a Virtual Universe (IMVU) forensics.

We hope to continue to improve JDFS L, and we are very happy to end the year with a strong JDFS L issue, and the fantastic news related to our improved indexing.

See you in 2016!

Dr. Ibrahim Baggili, PhD, Editor-in-Chief
Elder Family Endowed Chair, University of New Haven