Front Matter
# Journal of Digital Forensics, Security and Law, Vol. 7(2)

## Editorial Board

**Editor-in-Chief**  
Gary C. Kessler  
Embry-Riddle Aeronautical University  
Florida, USA

**Associate Editor-in-Chief**  
Marcus K. Rogers  
Purdue University  
Indiana, USA

<table>
<thead>
<tr>
<th>Section Editors</th>
<th></th>
</tr>
</thead>
</table>
| Digital Forensics | Gregg Gunsch  
Defiance College  
Ohio, USA  
Scott Inch  
Bloomsburg University  
Pennsylvania, USA  
Cyber Law  
Erin Kenneally  
Univ. of California San Diego  
California, USA  
Nigel Wilson  
The University of Adelaide  
South Australia, Australia  
Information Security |  
David Dampier  
Mississippi State University  
Mississippi, USA  
Daniel P. Manson  
Cal Poly Pomona  
California, USA  
Science of Digital Forensics | Fred Cohen  
California Sciences Institute  
California, USA  
Simson Garfinkel  
Naval Postgraduate School  
California, USA  
Book Review |  
Jigang Liu  
Metropolitan State University  
Minnesota, USA  
Jill Slay  
Univ. of South Australia  
South Australia, Australia  
Il-Yeol Song  
Drexel University  
Pennsylvania, USA  
Rahel Carsten Stahl  
De Montfort University  
Leicester, UK  
**Technology Corner** | Nick V. Flor  
University of New Mexico  
New Mexico, USA  
Regional Editors |  
Australia | Craig Valli  
Edith Cowan University  
Western Australia, Australia  
Europe/UK | Denis Edgar-Neville  
Canterbury Christ Church Univ.  
Canterbury, UK  
Latin America | Pedro Luís Prospero Sanchez  
University of Sao Paulo  
Sao Paulo, Brazil  
Mid-East and Africa | Andrew Jones  
Khalifa Univ of Science, Technology & Research  
Sharjah, United Arab Emirates  
Mid-East/Israel | Eli Weintraub  
Afeka Tel Aviv Academic College of Engineering  
Tel Aviv, Israel  
Editorial Board |  
John W. Bagby  
The Pennsylvania State Univ.  
Pennsylvania, USA  
Ibrahim Baggili  
Zayed University  
Arab Emirates  
David P. Biros  
Oklahoma State University  
Oklahoma, USA  
Philip Craiger  
Daytona State College  
Florida, USA  
Glenn S. Dardick  
Longwood University  
Virginia, USA  
Fred C. Kerr  
Consultant  
California, USA  
Linda K. Lau  
Longwood University  
Virginia, USA  
Wei Ren  
Chinese Univ. of Geosciences  
Wuhan, China  
Jill Slay  
Univ. of South Australia  
South Australia, Australia  
Il-Yeol Song  
Drexel University  
Pennsylvania, USA  
Bernd Carsten Stahl  
De Montfort University  
Leicester, UK  
**Copyright © 2012 ADFSL, the Association of Digital Forensics, Security and Law. Permission to make digital or printed copies of all or any part of this journal is granted without fee for personal or classroom use only and provided that such copies are not made or distributed for profit or commercial use. All copies must be accompanied by this copyright notice and a full citation. Copyright from the Editor is required to make digital or printed copies of all or any part of this journal for-profit or commercial use. Permission requests should be sent to Editor, JDFSL, 1642 Horsepen Hills Road, Maidens, Virginia 23102 or emailed to editor@jdfsl.org.**

**ISSN 1558-7215**
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/submission.asp. 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 (ADFL). The author must complete and return the copyright agreement before publication. The copyright agreement may be found at http://www.jdfsl.org/copyrighttransfer.pdf.

Additional information regarding the format of submissions may be found on the JDFSL website at http://www.jdfsl.org/authorinstructions.htm.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call for Papers</td>
<td>2</td>
</tr>
<tr>
<td>Guide for Submission of Manuscripts</td>
<td>2</td>
</tr>
<tr>
<td>From the Guest Editor</td>
<td>5</td>
</tr>
<tr>
<td>The Science of Digital Forensics: Factors Affecting Data Decay</td>
<td>7</td>
</tr>
<tr>
<td>Kevin Fairbanks and Simson Garfinkel</td>
<td></td>
</tr>
<tr>
<td>DNS in Computer Forensics</td>
<td>11</td>
</tr>
<tr>
<td>Neil Fowler Wright</td>
<td></td>
</tr>
<tr>
<td>Automated Identification and Reconstruction of YouTube Video Access</td>
<td>43</td>
</tr>
<tr>
<td>Jonathan Patterson &amp; Christopher Hargreaves</td>
<td></td>
</tr>
<tr>
<td>Toward Alignment Between Communities of Practice and Knowledge-Based Decision Support</td>
<td>61</td>
</tr>
<tr>
<td>Jason Nichols, David Biros, &amp; Mark Weiser</td>
<td></td>
</tr>
<tr>
<td>Digital Evidence Education at Schools of Law</td>
<td>75</td>
</tr>
<tr>
<td>Aaron Alva &amp; Barbara Endicott-Popovsky</td>
<td></td>
</tr>
<tr>
<td>Identifying and Attributing Similar Traces with Greatest Common Factor Analysis</td>
<td>89</td>
</tr>
<tr>
<td>Fred Cohen</td>
<td></td>
</tr>
<tr>
<td>Identifying Trace Evidence from Target-Specific Data Wiping Application Software</td>
<td>113</td>
</tr>
<tr>
<td>Gregory H. Carlton &amp; Gary C. Kessler</td>
<td></td>
</tr>
<tr>
<td>Book Review: System Forensics, Investigation, and Response</td>
<td>143</td>
</tr>
<tr>
<td>(Vacca &amp; Rudolph)</td>
<td></td>
</tr>
<tr>
<td>Nate Keith</td>
<td></td>
</tr>
<tr>
<td>Technology Corner: Automated Data Extraction Using Facebook</td>
<td>149</td>
</tr>
<tr>
<td>Nick V. Flor</td>
<td></td>
</tr>
<tr>
<td>Subscription Information</td>
<td>165</td>
</tr>
</tbody>
</table>