2015

Front Matter

Follow this and additional works at: https://commons.erau.edu/jdfs

Part of the Computer Law Commons, and the Information Security Commons

Recommended Citation

Available at: https://commons.erau.edu/jdfs/vol10/iss3/5

This Front Matter/Back Matter is brought to you for free and open access by the Journals at Scholarly Commons. It has been accepted for inclusion in Journal of Digital Forensics, Security and Law by an authorized administrator of Scholarly Commons. For more information, please contact commons@erau.edu, wolfe.309@erau.edu.
Volume 10, Number 3 (2015)

Editorial Board

Editor-in-Chief
Ibrahim (Abe) Baggili, PhD
University of New Haven
Connecticut, USA

Associate Editor-in-Chief
Linda K. Lau, PhD
Longwood University
Virginia, USA

Frank Adelstein, PhD
Cayuga Networks
New York, USA

John W. Bagby, JD
The Pennsylvania State University
Pennsylvania, USA

Diane Barrett, PhD, CISSP
Bloomsburg University
Pennsylvania, USA

David P. Biros, PhD
Oklahoma State University
Oklahoma, USA

Frank Breitinger
University of New Haven
Connecticut, USA

Raymond Choo, PhD
University of South Australia
South Australia, Australia

Kim Pui (KP) Chow, PhD
University of Hong Kong
Hong Kong, China

Fred Cohen, PhD, CEO
Management Analytics
California, USA

Philip Craigie, PhD, CISSP, CCFP
Daytona State College
Florida, USA

Glenn S. Dardick, PhD, CCE, CCFP
ADFSFL
Florida, USA

David Dampier, PhD
Mississippi State University
Mississippi, USA

Denis Edgar-Neville, PhD
Canterbury Christ Church University
Canterbury, UK

Barbara Endicott-Popovsky, PhD
University of Washington
Washington, USA

Nick V. Flor, PhD
University of New Mexico
New Mexico, USA

Simson Garfinkel, PhD
Naval Postgraduate School
California, USA

Pavel Gladyshev, PhD
University College Dublin
Ireland

Sanjay Goel
University at Albany
State University of New York
New York, USA

Gregg Gansch, PhD, PE, CISSP
Defiance College
Ohio, USA

Joshua James, PhD
Soongchunhyang University
South Korea

Andy Jones, PhD
University of South Wales
UK

Erin Kenneally, MFS, JD
Elchemy, Inc.
University of California San Diego
California, USA

Gary C. Kessler, PhD, CCE, CCFP, CISSP
Embry-Riddle Aeronautical University
Florida, USA

Jigang Liu, PhD
Metropolitan State University
Minnesota, USA

Michael M. Losavio, JD
University of Louisville
Kentucky, USA

Andrew Marrington, PhD
Zayed University
UAE

Martin Olvier, PhD, CCFP
University of Pretoria
South Africa

Denise Pheils, PhD, CISSP, PMP
Texas A&M
Texas, USA

Pedro Luís Próspero Sanchez, PhD
University of Sao Paulo
Sao Paulo, Brazil

John Riley, PhD
Bloomsburg University
Pennsylvania, USA

Marcus K. Rogers, PhD, CISSP
Purdue University
Indiana, USA

Vassil Roussev, PhD
University of New Orleans
Louisiana, USA

Neil Rowe, PhD
U.S. Naval Postgraduate School
California, USA

Katherine C. Seigfried-Spellar, PhD
The University of Alabama
Alabama, USA

Il-Yeol Song, PhD
ACM Distinguished Scientist
Drexel University
Pennsylvania, USA

Bernd Carsten Stahl, PhD
De Montfort University
Leicester, UK

Craig Valli, DIT
Edith Cowan University
Western Australia, Australia

Eli Weintraub, PhD, CISA
Afeka Tel Aviv Academic College of Engineering
Israel

Nigel Wilson
The University of Adelaide
South Australia, Australia

Copyright © 2015 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. Permission 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, 4350 Candlewood Lane, Ponce Inlet, FL 32127, or emailed to editor@jdfsl.org. ISSN 1558-7215

© 2015 ADFSL
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](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](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](http://www.jdfsl.org/for-authors).
Contents

Call for Papers ............................................................................................................................2
Guide for Submission of Manuscripts .....................................................................................2
From the Editor-in-Chief ..........................................................................................................5
Computer Forensic Projects for Accountants............................................................................7
Grover S. Kearns

Identification and Exploitation of Inadvertent Spectral Artifacts in Digital Audio........35
N. C. Donnangelo, W. S. Kuklinski, R. Szabo, R. A. Coury and G. R. Hamshar

On The Network Performance of Digital Evidence Acquisition of Small Scale Devices
Over Public Networks ..............................................................................................................59
Irvin Homem and Spyridon Dosis

A 3-D Stability Analysis of Lee Harvey Oswald in the Backyard Photo .........................87
Srivamshi Pittala, Emily Whiting and Hany Farid

Subscription Information .........................................................................................................99
FROM THE EDITOR-IN-CHIEF

Welcome to JDFSL’s third issue for 2015. I am very pleased to step in for this issue as the guest editor.

In this issue, we continue our multidisciplinary tradition. The first paper, *Computer Forensic Projects for Accountants*, argues the importance of computer forensics to accounting students and offers a set of exercises to provide an introduction to obtaining and analyzing data with free online forensics software. In the paper, figures of important steps are provided.

In the second paper, *Identification and Exploitation of Inadvertent Spectral Artifacts in Digital Audio*, the authors show that modulation products from local oscillators in a variety of commercial camcorders are coupled into the recorded audio track, creating narrow band time invariant spectral features. The authors show that those spectral features, left largely intact by transcoding, compression and other forms of audiovisual post processing, can encode characteristics of specific camcorders used to capture the audio files, including the make and model. The paper demonstrates an average probability of detection approaching 0.95 for identification of a specific camcorder in a population of thousands of similar recordings, with a probability of false alarm of only about 0.11.

In the third paper, *On The Network Performance of Digital Evidence Acquisition of Small Scale Devices Over Public Networks*, the authors describe the architecture of a comprehensive proactive digital investigation system, termed as the Live Evidence Information Aggregator (LEIA) to be used to collect digital evidence from potentially any device in real time over the Internet. Particular focus is made on the importance of the efficiency of the network communication in the evidence acquisition phase, in order to retrieve potentially evidentiary information remotely and with immediacy.

Finally, in the fourth paper, *A 3-D Stability Analysis of Lee Harvey Oswald in the Backyard Photo*, the authors discuss a key piece of forensics evidence in the assassination of U.S. President Kennedy – photographic evidence that is still debated today as to whether the famous backyard photo of Oswald, holding the same type of rifle used to assassinate the President, is a fake. Those claims include, among others, that Oswald’s pose in the photo is physically implausible. The authors, in their paper, describe a detailed 3-D stability analysis to determine if those claims are warranted.

Sincerely,

Dr. Glenn S. Dardick, PhD CCFP CCE
Guest Editor