

RANDALL J. BOYLE

Associate Professor
Dept. of Business Administration
Goddard School of Business & Economics
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EDUCATION

Ph.D., 2003, Management of Information Systems, Florida State University, Tallahassee, FL.
Dissertation: Dispersed Deception: An examination of the impacts of computer mediation, proximity, and familiarity on truth bias
Master's in Public Administration, 2000, Brigham Young University, Provo, UT.
Dean's List, GPA 3.89 of 4.00
B.S. Business Finance, 1998, Brigham Young University, Provo, UT.
A.A. General Education, 1996, Weber State University, Ogden, UT.

RESEARCH ACTIVITIES

REFEREED PUBLICATIONS

1. Boyle, R., Clements, J., and Proudfoot, J., (2017). Measuring Deception: A Look at Antecedents to Deceptive Intent (Forthcoming at American Journal of Psychology).
2. Boyle, R., Chandrashekar, D., and Clements, J., (2017) Valuing Information Security: A Look at the influence of user engagement on information security valuations, *Journal of Information Privacy and Security*, 13:3, 137-156.
3. Proudfoot, J., Boyle, R., Schuetzler, R., (2016). Man vs. machine: Investigating the effects of adversarial system use on end-user behavior in automated deception detection interviews, *Decision Support Systems*, 85:23-33.
4. Clements, J., Boyle, R., and Proudfoot, J., (2016). Exploring political skill and deception. *International Journal of Sociology and Social Policy* 36(3/4): 138-156.
5. McDonald, D., Boyle, R., Anderson, J., (2016). When Deceitful Chats Look Truthful. *Journal of Computer Information Systems*, 56(4): 331-340.
6. Boyle, R., C. Kacmar, J. George (2010) Electronic Deception: How Proximity, Computer-mediation, and the Truth Bias may Influence Deceptive Messages. In *Interdisciplinary Perspectives on E-Collaboration: Emerging Trends and Applications*. Hershey: IGI Global (ISBN-13: 978-1615206766).
7. Boyle, R., C. Kacmar, J. George (2009) Distributed Deception: An Investigation of the Effectiveness of Deceptive Communication in a Computer-mediated Environment. In P. Zaphiris & C. S. Ang (Eds.), *Human Computer Interaction: Concepts, Methodologies, Tools, and Applications* (1970-1994). Hershey: IGI Global.
8. Boyle, R., C. Kacmar, J. George (2008) Distributed Deception: An Investigation of the Effectiveness of Deceptive Communication in a Computer-mediated Environment. *International Journal of E-Collaboration* 4(3): 14-39. (Paper of the Year)

9. Boyle, R., Ruppel, C. (2006). On-line Purchasing Intent: The Effect of Personal Innovativeness, Perceived Risk, and Computer Self-Efficacy. *Journal of International Technology and Information Management* 15(2): 61-74.
10. Thatcher, J. B., Lee P. Stepina, Randall J. Boyle (2003). Turnover of Information Technology Workers: Examining Empirically the Influence of Attitudes, Job Characteristics, and External Markets. *Journal of Management Information Systems* 19(3): 231-261.

REFEREED CONFERENCE PAPERS

1. Reed, D., and Boyle, R., (2017). The Social Value of Amending the Computer Fraud and Abuse Act and the Electronic Communications Privacy Act. *Pacific Southwest Academy of Legal Studies in Business 2017 Annual Conference*, Palm Springs, CA.
2. McDonald, D., Boyle, R., and Anderson, J., (2014). Using an SOM to Visualize Deceptive Chat Content. *International Association for Computer Information Systems*, Las Vegas, NV.
3. Proudfoot, J., Boyle, R., Clements, J., (2013). Mitigating Threats to Collaboration and CMC: Identifying Antecedents of Online Deviance. *Hawaii International Conference on System Sciences*, Waikoloa, HI.
4. Boyle, R., Clements, J., Proudfoot, J., (2012). Predicting Deceptive Behavior: Exploring antecedents to deceptive behaviors. *National Communication Association 98th Annual Conference*, Orlando, FL.
5. Boyle, R., Ruppel, C., (2005). The Impact of Media Richness, Suspicion, and Truth Bias on Deception Detection. *Hawaii International Conference on System Sciences*, Waikoloa, HI.
6. Boyle, R., Ruppel, C., (2004). On-line Purchasing Intent: The Effect of Personal Innovativeness, Perceived Risk, and Computer Self-Efficacy. In the Proceedings of the Annual Meeting of the *Southern Association for Information Systems*, Savannah, GA.
7. Boyle, R., DeWitt, T., (2002). Trust: How M.A.N. Influences Online Transactions. In the Proceedings of the *American Marketing Association Winter 2002 Educators Conference*, Austin, TX.
8. Boyle, R., Thatcher, J., (2001). Organizational Commitment and IT workers: A Conceptual Model. In the Proceedings of the Annual Meeting of the *Southern Association for Information Systems*, Savannah, GA.

CURRENT RESEARCH PAPERS

1. Boyle, R., and Clements, J., (2017). Compulsive Use of Mobile Applications (under review at Journal of the Association for Information Systems).
2. Proudfoot, J., Boyle, R., and Clements, J., (2017). Online Anti-Social Behaviors: An examination of contributing factors to cyber bullying (Targeted for *Information Systems Research*).
3. King, S., Clements, J., Boyle, R., and Noack, D., (2017). The Impact of Brand Self Perceptions on habitual IS use (targeted for the Journal of Marketing).
4. Noack, D., Boyle, R., Clements, J., and King, S., (2017). Innovative Habits: A look at the impact of innovativeness on habitual IS use and individual online purchasing intent.
5. Clements, J., Boyle, R., Noack, D., and King, S., (2017). Sinking Habits: A look at the impact of sunk costs on automatic IS use (targeted for JAIS).
6. Reed, D., and Boyle, R., (2017). The Social Value of Amending the Computer Fraud and Abuse Act and the Electronic Communications Privacy Act (Targeted for *Utah Law Review*).
7. Boyle, R., (2017) Bot Purge: A look at how fraudulent accounts may impact public valuations.

8. Boyle, R., Proudfoot, J., (2018). Cross Pollination: The effects of cross-site user accounts on account security. (Targeted for *Information Systems Research*.)
9. Boyle, R., Proudfoot, J., (2018). Adaptive Mangling Rules: A comparison of password sources, structures, and strength. (Targeting *IEEE Transactions*)

Books

1. Kroenke, D., Boyle, R., (2018) *Experiencing MIS* (8th edition). New Jersey: Pearson. (ISBN: TBD).
2. Kroenke, D., Boyle, R., (2017) *Using MIS* (10th edition). New Jersey: Pearson. (ISBN: 978-0134606996).
3. Kroenke, D., Boyle, R., (2016) *Using MIS* (9th edition). New Jersey: Pearson. (ISBN: 978-0134106786).
4. Kroenke, D., Boyle, R., (2016) *Experiencing MIS* (7th edition). New Jersey: Pearson. (ISBN: 978-0134319063).
5. Kroenke, D., Boyle, R., (2015) *Using MIS* (8th edition). New Jersey: Pearson. (ISBN: 978-0133919868).
6. Kroenke, D., Boyle, R., (2015) *Experiencing MIS* (6th edition). New Jersey: Pearson. (ISBN: 978-0133939132).
7. Boyle, R., Panko, R., (2014) *Corporate Computer Security* (4th edition). New Jersey: Pearson. (ISBN: 978-0133545197).
8. Boyle, R., Proudfoot, J., (2014). *Applied Information Security Labs: A Hands-on Approach* (2nd edition). New Jersey: Pearson. (ISBN: 978-0133547436).
9. Boyle, R., Clements, J., (2014). *Applied Networking Labs: A Hands-on Guide to Networking and Server Management* (2nd edition). New Jersey: Pearson. (ISBN: 978-0133545180).
10. Boyle, R., Panko, R., (2012) *Corporate Computer Security* (3rd edition). New Jersey: Pearson (ISBN: 0132145359).
11. Boyle, R., (2012). *Applied Networking Labs: A Hands-on Guide to Networking and Server Management* (计算机网络实验手册, far Hongliang, Trans.). Beijing, China: Tsinghua University Press (Original work published 2011). (ISBN: 9787302267560).
12. Boyle, R., (2011). *Applied Networking Labs: A Hands-on Guide to Networking and Server Management*. New Jersey: Pearson. (ISBN: 0132310341).
13. Boyle, R., (2010). *Applied Information Security: A Hands-on Approach*. New Jersey: Pearson. (ISBN: 0136122035).

Books in Process

1. Kroenke, D., Boyle, R., (2019) *Using MIS* (11th edition). New Jersey: Pearson. (ISBN: TBD).
2. Kroenke, D., Boyle, R., (2018) *Experiencing MIS* (6th edition). **Chinese** translation in Taiwan (Original work published 2015). New Jersey: Pearson. (ISBN: TBD).
3. Kroenke, D., Boyle, R., (2019) *Experiencing MIS* (7th edition). **Korean** translation (Original work published 2016). New Jersey: Pearson. (ISBN: TBD).
4. Boyle, R., (2018). *Applied Management Information Systems: A Hands-on Guide* (1st edition).
5. Boyle, R., Proudfoot, J., (2018). *Applied Information Security Labs: A Hands-on Approach* (3rd edition).
6. Boyle, R., Clements, J., (2018). *Applied Networking Labs: A Hands-on Guide to Networking and Server Management* (3rd edition).

Other Reviewed Publications

1. Boyle, R., (2017). Instructor slide deck for *Experiencing MIS* (8th edition). New Jersey: Pearson.

2. Boyle, R., (2017). Instructor's manual, study guide, slide deck, and test bank for *Using MIS* (10th edition). New Jersey: Pearson.
3. Boyle, R., and Panko, R., (2014). Instructor's manual, study guide, slide deck, and test bank for *Corporate Computer Security* (4rd edition). New Jersey: Pearson.
4. Boyle, R., (2013, Spring). A New Way to Steal. *Longwood Magazine*, pp. 48.
5. Boyle, R., Panko, R., (2012). Instructor's manual, study guide, slide deck, and test bank for *Corporate Computer Security* (3rd edition). New Jersey: Pearson.

ACADEMIC ACTIVITIES

DIRECTED PROJECTS

1. Advanced Network Administration (2017)
2. Enterprise Data Breaches (2016)
3. Enterprise Surveillance System Implementation (2012)
4. Microsoft SharePoint Implementation (2011)
5. Proprietary IDS Implementation (2011)
6. Border Management and Proxies (2011)
7. Green Grid Computing (2010)
8. Anti-Fraud Systems (2010)

ACADEMIC PROGRAM DEVELOPMENT

1. Coordinated curriculum changes for the Information Systems & Technology courses at The Goddard School of Business and Economics (2017/2018).
2. Coordinated and managed major curriculum changes for the Information Systems & Technology AS, BS, and BIS degrees at The Goddard School of Business and Economics (2015/2016). New courses were added/developed, curriculum map was reworked, prerequisites changed on most classes, and all changes were managed through various committees.
3. Managed a summer IT internship program between Longwood University and Carnegie Mellon University's ITLab (#1 nationally) from 2013 to 2015. All students were offered room, board, tuition, airfare, a stipend, and a substantial tuition scholarship toward their Masters of Science in Information Systems degree at Carnegie Mellon University.
4. Designed, created, configured, and managed a cloud-based virtualized computing environment for Cyber Security training. Deployed a multi-OS training environment including Microsoft Windows 7, Microsoft Windows 8, Microsoft Server 2008, Microsoft Server 2012, Ubuntu, Mint, Fedora, OpenSUSE, BackTrack (Kali Linux), and CentOS. Deployed hundreds of secure virtual machines for university and academic use. Configured virtual networks, internal and external firewalls, intrusion detection systems, UPS, NAS, application filtering, and inline antivirus scanning.
5. Coordinated, developed, and managed MSIS Orientation for inaugural class.
6. Launched new graduate program (Master of Science in Information Systems) with 50+ students in the inaugural class. Developed and managed MSIS program.
7. Omniture (Adobe Corp.) Web Analytics Competition (2009, 2010). Initiated, coordinated, and managed the inaugural OWAC event at the University of Utah.
8. Worked to establish a Master of Information Systems (MSIS) degree program at the University of Utah. Designed all courses and content in the Security track including IT Forensics and Network Defense. Completed Fall 2007.

9. Established the MSDN Academic Alliance (MSDNAA) program at the U. of Utah, Spring 2007.
10. Developed and implemented a Telecommunications/Security Lab (2004). Provides 1) hands-on training for all core Microsoft Certified Systems Engineer (MCSE) exams 2) complex network simulations (OPNET), 3) Linux tutorials, and 4) 34 hands-on security exercises.
11. Grid Computing Implementation. Planned Summer 2004 and completed Fall 2004. Provides high capacity computing power to solve complex research problems put forth by UAH researchers.
12. Develop Graduate Information Assurance Certificate program at UAH. Planned Summer 2004, Completed Fall 2004.

TEACHING EXPERIENCE

1. Decision Support Systems, ISM4117, FSU (SU 2001, SU 2002) (new prep).
2. Information Systems Analysis and Design, ISM4030, FSU (FA 2002) (new prep).
3. Networking and Telecommunications, ISM4220, FSU (SP 2003) (new prep).
4. Networking and Telecommunications, MIS460/MIS560, UAH (FA 2003, SP 2004, FA 2004, SP 2005).
5. Web Servers, MIS465/MIS565, UAH (FA 2003) (new prep).
6. Network Security, MIS660, UAH (SP 2004, SP 2005) (new prep).
7. Information Systems in Organizations, MIS301, UAH (FA 2004, SP 2005).
8. Introduction to Information Systems, IS4410, U. of Utah (FA 2005, SP 2006, FA 2006, SP 2007, FA 2007, SP 2008, FA 2008, SP 2009, FA 2009, FA 2010, SP 2011).
9. IT Security, IS4470, U. of Utah (SP 2006, FA 2006, SP 2007, FA 2007, SP 2008, FA 2008, SP 2009, FA 2009, SP 2010, FA 2010, SP 2011).
10. Advanced IT Security, IS5910, U. of Utah (SP 2007).
11. Computer Security, ACCTG6520, U. of Utah (SP 2007, SP 2008, FA 2008).
12. Networks & Servers, IS4440, U. of Utah (FA 2008, SP 2009, FA 2009, SP 2010, FA 2010, SP 2011).
13. IT Security, IS6570, U. of Utah (FA 2009, SP 2010, FA 2010, SP 2011).
14. Principles of IS, ISYS 370, Longwood University (FA 2012, SP 2013, FA 2013, SP 2014, FA 2014, SP 2015).
15. Cyber Security, ISYS 376, Longwood University (FA 2012, FA 2013, SP 2014, FA 2014, SP 2015).
16. Adv. Cyber Security, ISYS476, Longwood University (FA 2012(new prep), FA 2013).
17. Network Communications, ISYS473, Longwood University (SP 2013, SP 2014, FA 2014, SP 2015).
18. Information Systems Internship, ISYS492, Longwood University (SU 2013, FA 2014, SU 2014).
19. Information Technology for Business, IST3110, Weber State University (FA 2015, SP 2016).
20. Networks & Data Communications, IST3610, Weber State University (FA 2015, SP 2016, FA 2016, SP 2017, FA 2017).
21. Information Security I, IST4600, Weber State University (FA 2015, FA 2016, SP 2017, FA 2017).
22. Information Assurance in the Enterprise, MBA6640, Weber State University (FA 2016, SP 2017, FA 2017).
23. Introduction to Information Systems, IST2020, Weber State University (FA 2016, SP 2017, FA 2017).
24. Networking and Information Systems, MBA6630, Weber State University (SP 2017, FA 2017).

ACADEMIC HONORS

GRANTS

1. Academic Resources and Computing Committee, grant for virtual computing lab, Weber State University, \$16,500 (2016).

2. Research grant from the Center for Leadership in Ethics and Sustainability, Weber State University, \$2,500 (2016).
3. Goddard School of Business Research Grant, Weber State University, \$8,000 (2016).
4. Goddard School of Business Research Grant, Weber State University \$8,000 (2015).
5. David Eccles School of Business Research Grant, University of Utah (2010).
6. Teaching grant for IT infrastructure to support core IS courses (IS4440, IS4470, and IS4415) (\$50,000) (2009).
7. David Eccles School of Business Research Grant, University of Utah (2009).
8. David Eccles School of Business Research Grant, University of Utah (2008).
9. David Eccles School of Business Research Grant, University of Utah (2007).
10. CMER Research Grant, University of Alabama in Huntsville (2004).
11. Dissertation Research Grant, Florida State University (2003).

TEACHING AWARDS

1. Nominated for Crystal Crest award, Weber State University, (2017).
2. Nominated for the Alston Award for Excellence in Teaching, Weber State University, (2017).
3. Nominated for the H. Aldous Dixon Award, Weber State University, (2017) university-wide.
4. Weber State Davis Campus Outstanding Professor, Weber State University, (2017) university-wide.
5. Nominated for a Crystal Crest award, Weber State University, (2016).
6. Delta Sigma Pi Teaching Award, Longwood University, (2015).
7. Outstanding First Year Student Advocate, Longwood University (2014) university-wide.
8. Sigma Sigma Sigma ($\Sigma\Sigma\Sigma$), Favorite Professor Award, Longwood University (2014) university-wide.
9. Societas Digna, Crowned Seven Leadership Award, Longwood University (2014) university-wide.
10. Delta Sigma Pi Teaching Award, Longwood University, (2013).
11. Distinguished Teaching Award, College of Business & Economics, Longwood University, \$1,500 prize award (2013).
12. Pi Beta Phi Teacher Appreciation Award, University of Utah (2011), university-wide.
13. Sigma Chi Distinguished Teaching Award, University of Utah (2011), university-wide.
14. David Eccles School of Business MSIS Influential Teacher Award, University of Utah (2011).
15. MSIS Contribution Award, University of Utah (2010).
16. David Eccles School of Business MSIS Teaching Award, University of Utah (2010).
17. David Eccles School of Business MSIS Faculty Excellence Award, University of Utah (2010).
18. LDSSA Excellence in Education Award, University of Utah (2009), university-wide.
19. Marvin J. Ashton Teaching Excellence Award, University of Utah, \$5,000 prize award (2008).
20. Undergraduate Teaching Award, University of Alabama in Huntsville (2005).
21. Nominated for Undergraduate Teaching Award, University of Alabama in Huntsville (2004).
22. Nominated for Doctoral Student Teaching Award, Florida State University (2003).

ASSISTANTSHIPS AND SCHOLARSHIPS

1. Management of Information Systems Teaching Assistantship, Florida State University (2000-2001).
2. Management of Information Systems Research Assistantship, Florida State University (2001-2002).
3. Public Administration Teaching Assistantship, Brigham Young University (1999-2000).
4. Public Administration Student Scholarship, Brigham Young University (1998-2000).
5. Academic Scholarship Brigham Young University (1996-1998).

6. Academic Scholarship Weber State University (1995-1996).

FELLOWSHIPS

1. College of Business Fellowship, Florida State University (2000-2003).

SERVICE

PROFESSIONAL SERVICE

1. Executive board member, Association of Information Systems (AIS) Special Interest Group Education (SIGED), website director, October, 2017-current.
2. DARPA Project Report Evaluation, *RKI A System of Systems Identity Approach*, ENT Corp., October 13, 2017.
3. Technology Evaluation and Response to U.S. Patent Office, ENT Corp., February 14, 2017.
4. Technology Assessment and Vetting, ENT Corp., January 11, 2016.
5. Board member, Commonwealth Center for Advanced Logistics Systems (CCALS) Technical Advisory Council, (2013-2015).
6. Reviewer, Pearson Higher Ed., (2011).
7. Reviewer, Pearson Higher Ed., (2010).
8. Reviewer, Information Systems Research (ISR) (2009).
9. Reviewer, International Conference on Information Systems (ICIS) (2008).
10. Reviewer, International Conference on Information Systems (ICIS) (2007).
11. Session Chair, 2006 Winter Conference on Business Intelligence (2006).
12. Reviewer, International Conference on Information Systems (ICIS) (2006).
13. Reviewer, Small Group Research (2006).
14. Reviewer, American Marketing Association Conference (2004).
15. Reviewer, Southern Association for Information Systems (2003).
16. Reviewer, Hawaii International Conference on System Sciences (2001).
17. Volunteer, International Conference on Information Systems (ICIS), New Orleans, Louisiana (2001).
18. Reviewer, Group 2001, the ACM 2001 International Conference on Supporting Group Work (2000-2001).

UNIVERSITY SERVICE

1. Career Service Advisory Group, GSBE committee member, Weber State University, (2017-current).
2. IS&T Area Coordinator, Management department, Weber State University, (2015-current).
3. Information Technology Governance Council, university committee, committee member, Weber State University (2016-current).
4. Academic Resources & Computing Committee, university committee, committee member, Weber State University (2016-current).
5. The Golden Key Honor Society, Weber State University, faculty advisor, Weber State University (2016-current).
6. IS&T Curriculum Committee, GSBE, committee member, Weber State University (2015-current).
7. Student Engagement Committee, GSBE, committee member, Weber State University (2015-current).
8. Coordinator Microsoft Imagine program GSBE, Weber State University (2015-Current).
9. IST Fifth-year Program Review, GSBE, contributor, Weber State University (2016).
10. MBA Curriculum Committee, Longwood University (2012-2015).

11. Technology Advisory Committee, Longwood University (2012-2015).
12. Online Advisory Committee, Longwood University (2012-2015).
13. Student Environment Committee, Longwood University (2012-2015).
14. Information Systems Student Organization Advisor, Longwood University (2013-2015).
15. Coordinator for Microsoft DreamSpark Program, Longwood University (2012-2015).
16. Faculty Search Committee, COBE, committee member, Longwood University (2014-2015).
17. VP of Technology Search Committee, committee member, Longwood University (November, 2014).
18. Cyber Security Education, Admissions Open House, Longwood University, (November 22, 2014).
19. Faculty Search Committee, COBE, committee member, Longwood University (2013-2014).
20. Undergraduate Curriculum Committee, DESB, committee member, U. of Utah (2011-2012).
21. Coordinator MSDNAA program DESB, U. of Utah (2007-2012).
22. Director of Master of Science in Information Systems (MSIS) program, U. of Utah (2008-2010).
23. Faculty Advisor to Tau Epsilon Kappa (TEK) student group, U. of Utah (2007-2011)
24. Master of IS Committee, committee member, U. of Utah (2007-2011).
25. Coordinator Omniture Competition, U. of Utah (2009-2010)
26. Undergraduate IS Advisor, University of Utah (2007-2009).
27. Department Faculty Evaluation and Promotion Committee, University of Alabama in Huntsville, committee member (2004-2005).
28. Department Undergraduate Curriculum Committee, University of Alabama in Huntsville, committee member (2004-2005).
29. Computer Network Services Advisory Committee, University of Alabama in Huntsville, committee member (2003-2005).
30. Information Assurance Committee, University of Alabama in Huntsville, committee member (2003-2005).
31. Undergraduate Curriculum Committee, College of Administrative Science, committee member (2003-2004).

COMPUTER EXPERTISE

CERTIFICATIONS

1. 7-Habbits Leadership Trainer Certification
2. 7-Habbits Leadership Certification
3. MCP, MCSE, MCSE+I.
4. Implementing and Supporting Windows NT Workstation 4.0 (70-073).
5. Implementing and Supporting Windows NT Server 4.0 (70-076).
6. Implementing and Supporting Windows NT Server 4.0 in the Enterprise (70-068).
7. Networking Essentials (70-058).
8. Internetworking Microsoft TCP/IP on Microsoft Windows NT 4.0 (70-059).
9. Internet Information Server (70-087).

SECURITY

- Threat Severity Analysis, Risk Analysis
- Information Assurance
- Incident Response and Disaster Recovery
- Password crackers
- Packet sniffers
- Intrusion Detection Systems

- Firewall design and implementation
- Cryptographic theory and systems
- Malware management
- Application layer security
- Wireless security & Implementation
- Spam Prevention
- Alternate Data Streams
- Mobile Forensics
- Intrusion Prevention Systems
- Steganography
- Network and host scanners
- File/Data Recovery
- Forensic data analysis
- Penetration testing
- Security appliances

SYSTEMS

- Virtualized Computing Environments
- Linux: Linux Mint, Ubuntu, Debian, Fedora, etc. FreeBSD & Unix
- Apache Web Server, LAMP, WAMP, etc.
- Windows Server NT, 2003, 2008, 2012, 2016
- Active Directory, Exchange, SharePoint
- Internet Information Server (IIS)
- OPNET, network modeling, design, and testing

CODING

- Visual Basic, HTML, CSS, ASP, PHP.

DATABASE

- Microsoft SQL Server, MySQL, Microsoft Access, PowerBuilder, Oracle.

WORK EXPERIENCE

PROFESSIONAL PRESENTATIONS

1. University Welcome Panel, Purple Carpet Event, Weber State University, October 27, 2017.
2. Prototyping Innovative Products, American Preparatory Academy workshop, Weber State University, October 24, 2017.
3. Mobile Application Development Workshop, Early Executives Leadership Academy, Weber State University, August 1, 2017.
4. Panel on success in college and the workplace, Early Executives Leadership Academy, Weber State University, August 1, 2017.
5. Careers in Cyber Security, WSU PREP, Weber State University, July 10, 2017.
6. Meeting the Demand for Information Systems Workers, *Pearson Live Lecture*, Pearson Education Inc., webinar, April 7, 2017 (nation-wide).
7. Internet of Things (IoT) and Application Security, Faculty-in-Residence, Weber State University, February 10, 2017.
8. The Target Data Breach, WSU MBA, Weber State University, November 30, 2016.
9. Entering the Virtual World, *Pearson Live Lecture*, Pearson Education Inc., webinar, Sept 29, 2016 (nation-wide, approximately 200 participants).
10. 3D Printing and Innovation at GSBE, WSU GSBE Advisory Board Meeting, Weber State University, September 27, 2016.
11. Corporate Data Breaches, WSU MBA, Weber State University, June 13, 2016.

12. The Social Value of Amending the Computer Fraud and Abuse Act and the Electronic Communications Privacy Act, Weber State University, April 23, 2016.
13. Cross-pollination and Identification of Botnets, Beta Alpha Psi, Weber State University, March 29, 2016.
14. The Effects of Password Reuse and Cross-pollination, Infragard, Salt Lake City, March 23, 2016.
15. The Target Data Breach, WSU MBA, Weber State University, December 2, 2015.
16. Hashing, Encrypting, and Testing Corporate Security, Faculty-in-Residence, Weber State University, October 30, 2015.
17. Corporate Data Breaches, Beta Alpha Psi, Weber State University, October 20, 2015.
18. The Age of the Data Breach, *Pearson Live Lecture*, Pearson Education Inc., virtual lecture, April 13, 2015 (nation-wide).
19. Trends in Cyber Security Education, Information Systems Audit and Control Association (ISACA), Richmond Virginia chapter, Richmond VA, February 5, 2015.
20. Cyber Security Workforce Education, *Healthcare Information and Management Systems Society (HIMSS) 2014 VA Conference*, Williamsburg VA, November 6, 2014.
21. Opportunities in Cyber Security Education, Longwood Dual Enrollment Seminar, Longwood University, July 12, 2014.
22. Women in Cyber Security, Girl Scout Leadership Institute, Longwood University, June 28, 2014.
23. Careers in Information Systems and Security, FBLA, Longwood University, March 11, 2014.
24. Deceptive Communication, Faculty-in-Residence, Longwood University, October 23, 2013.
25. Panel, Skill-based Education, Faculty-in-Residence, Longwood University, March 21, 2013.
26. Careers in Information Systems and Security, FBLA, Longwood University, March 14, 2013.
27. Tech Investment Strategies, Student Investment Fund, Longwood University, February, 19, 2013.
28. Panel, Cyber Security Challenges, Longwood University, October, 8 2012.
29. Network Forensic Analysis. Presented to Longwood University, VA (2012).
30. Predicting Deceptive Behaviors. Presented to Suffolk University, MA (2012).
31. Attack Methodology. Presented to Society of Former Special Agents of the Federal Bureau of Investigation (FBI) (2011).
32. Threat Severity Analysis. Televised presentation to Salt Lake City Corporation. (2006).
33. National Security Trends. Presented to the University of Utah Information Systems Advisory Board at the University of Utah (2005).

PROFESSIONAL EXPERIENCE

1. Associate Professor, Weber State University. (2015-current).
2. Associate Professor, Longwood University. (2012-2015).
3. Full Professor (lecturer), University of Utah. (2010).
4. Director MSIS Program, University of Utah. Full Responsibility for directing MSIS program and teaching 7 core IS courses annually (2008 - 2010).
5. Associate Professor (lecturer), University of Utah. (2009).
6. Assistant Professor (lecturer), University of Utah. (2007 - 2009).
7. Visiting Professor, University of Utah. Full responsibility for 6 core IS courses annually (2005 - 2007).
8. Assistant Professor, University of Alabama in Huntsville. Full responsibility for 6 core IS courses (2003-2005).

9. Instructor, Florida State University. Full responsibility for core information systems classes for MIS majors. (2000-2003).
10. Teaching Assistant, Brigham Young University. Conducted Accounting lab sessions, taught weekly Accounting review classes, and graded papers (1999-2000).
11. Manager, Boyle Appliance Center, Ogden, Utah. Managed warehouse and delivery personnel, trained new delivery and office personnel, and managed computer systems. (1985-1999).

NEWS MEDIA

1. Interview for television, 3 scams every college student and their parents should know, KSL News, October 3, 2017. <https://www.ksl.com/?sid=46035562&nid=148>.
2. 3-D Printing Meets WSU, *The Signpost*, Interview with Dr. Randy Boyle, Weber State University, February 24, 2016, by Kellie Plumhof.
3. Longwood University, Expert: Keep your kids on your desk, not on your desktop. Interview with Dr. Randy Boyle. *Longwood University press release*, March 13, 2015.
4. McWilliams, Matthew, Boyle: Phishing attempts getting much more sophisticated, *Insider*, Longwood University, February 3, 2015.
5. Boyle, R. (2015, January 17). Why 'Blackhat' is Hacking Done Right, *The Daily Beast*, New York City, NY, <http://www.thedailybeast.com/articles/2015/01/17/why-blackhat-is-hacking-done-right.html>.
6. Boyle, R. (2014, December 4). Cyber-security on more minds as holiday shoppers head out, *The Daily Progress*, Charlottesville, VA, http://www.dailypress.com/news/local/cyber-security-on-more-minds-as-holiday-shoppers-head-out/article_c708fda8-7682-11e4-801b-dbddcd1c1a1f.html.
7. Longwood students benefiting from relationship with top graduate program in information systems, Longwood University, press release, June 11, 2014.
8. Boyle, R. (2014, July 3). Charlottesville, VA, Understanding deception [interview]. Radio interview on National Public Radio (NPR) with Sandra Hausman's *With Good Reason*. <http://withgoodreasonradio.org/2014/10/duping-delight-and-whos-likely-to-lie/>.
9. Boyle, R. (2013, June 3). Charlottesville, VA, Detecting deception [interview]. Radio interview on WVTF with Sandra Hausman.
10. Interview, Large Scale Data breaches, ABC4 News, April 12, 2012.
11. LU Professor Co-Authors Deception Study, Farmville Herald, June 12, 2013.
12. Four Longwood University College of Business and Economics Students Selected to Attend Carnegie Mellon's ITLAB: Junior Summer Internship. PRWeb, April 30, 2013.
13. Study by Longwood professor predicts a person's willingness to lie, Longwood University press release, April 30, 2013.
14. Four Longwood business students chosen for Carnegie Mellon internship, Longwood University, press release, May 1, 2013.

STUDENT-INSTRUCTOR EVALUATION SUMMARY

Florida State University

| Term | Course | Hours | Florida State University Course Title | Enrolled | Responded | FSU SIE Score |
|-------------|-----------|-------|--|----------|-----------|------------------|
| 2001 | | | | | | |
| Summer | ISM4117_1 | 3 | Decision Support Sys. [†] | 32 | 23 | 4.4* |
| 2002 | | | | | | |
| Summer | ISM4117_1 | 3 | Decision Support Sys. | 33 | 25 | 4.5* |
| Fall | ISM4030_2 | 3 | Systems Analysis [†] | 11 | 8 | 4.8* |
| | ISM4030_3 | 3 | Systems Analysis | 26 | 23 | 4.6* |
| 2003 | | | | | | |
| Spring | ISM4220_1 | 3 | Networking / Telecom [†] | 33 | 24 | 4.7* |
| | ISM4220_1 | 3 | Networking / Telecom | 34 | 33 | 4.8* |

University of Alabama at Huntsville

| Term | Course | Hours | U. of Alabama Huntsville Course Title | Enrolled | Responded | Course Score | Global Score | College Average | UAH Dept. Average |
|-------------|----------|-------|--|----------|-----------|-----------------|-----------------|--------------------|----------------------|
| Fall | MIS460_1 | 3 | Telecommunications | 23 | 18 | 4.47 | 4.44 | 4.26 | 4.05 |
| | MIS460_2 | 3 | Telecommunications | 11 | 6 | 4.49 | 4.67 | 4.26 | 4.05 |
| | MIS560_1 | 3 | Telecommunications | 4 | 3 | 4.68 | 5.00 | 4.26 | 4.05 |
| | MIS560_2 | 3 | Telecommunications | 9 | 8 | 4.36 | 4.63 | 4.26 | 4.05 |
| | MIS465_1 | 3 | Web Server [†] | 22 | 12 | 4.65 | 4.92 | 4.26 | 4.05 |
| | MIS565_1 | 3 | Web Server | 4 | 4 | 4.74 | 4.75 | 4.26 | 4.05 |
| 2004 | | | | | | | | | |
| Spring | MIS460_1 | 3 | Telecommunications | 30 | 19 | 4.83 | 4.89 | 4.35 | 4.22 |
| | MIS460_2 | 3 | Telecommunications | 10 | 7 | 4.68 | 4.86 | 4.35 | 4.22 |
| | MIS560_2 | 3 | Telecommunications | 2 | 1 | 4.80 | 5.00 | 4.35 | 4.22 |

| | | | | | | | | | |
|-------------|----------|---|----------------------------------|----|----|------|------|------|------|
| | MIS660_1 | 3 | Info. Security Mgt. [†] | 18 | 10 | 4.51 | 4.70 | 4.35 | 4.22 |
| Fall | MIS460_1 | 3 | Telecommunications | 27 | 25 | 4.93 | 4.96 | 4.39 | 4.31 |
| | MIS460_2 | 3 | Telecommunications | 13 | 13 | 4.68 | 4.85 | 4.39 | 4.31 |
| | MIS560_1 | 3 | Telecommunications | 5 | 5 | 4.97 | 5.00 | 4.39 | 4.31 |
| | MIS560_2 | 3 | Telecommunications | 3 | - | - | - | 4.39 | 4.31 |
| | MIS301_1 | 3 | Intro to MIS [†] | 28 | 21 | 4.62 | 4.81 | 4.39 | 4.31 |
| 2005 | | | | | | | | | |
| Spring | MIS301_1 | 3 | Intro to MIS | 47 | 45 | 4.69 | 4.78 | 4.40 | 4.34 |
| | MIS460_1 | 3 | Telecommunications | 36 | 32 | 4.86 | 4.84 | 4.40 | 4.34 |
| | MIS560_1 | 3 | Telecommunications | 4 | 3 | 4.98 | 5.00 | 4.40 | 4.34 |
| | MIS490_1 | 3 | Special Projects | 2 | 2 | 5.00 | 5.00 | 4.40 | 4.34 |
| | MIS660_2 | 3 | Info. Security Mgt. | 7 | 4 | 4.95 | 5.00 | 4.40 | 4.34 |

University of Utah

| Term | Course | Hours | University of Utah Course Title | Enrolled | Responded | Course Score | Instr. Score |
|-------------|-----------|-------|------------------------------------|----------|-----------|-----------------|-----------------|
| Fall | IS4410_3 | 3 | Intro to MIS | 73 | 59 | 5.38 | 5.53 |
| | IS4410_4 | 3 | Intro to MIS | 62 | 56 | 5.65 | 5.77 |
| 2006 | | | | | | | |
| Spring | IS4410_1 | 3 | Intro to MIS | 73 | 59 | 5.47 | 5.57 |
| | IS4470_1 | 3 | Telecom. & Security [†] | 57 | 50 | 5.52 | 5.59 |
| Fall | IS4410_3 | 3 | Intro to MIS | 83 | 72 | 5.50 | 5.59 |
| | IS4410_4 | 3 | Intro to MIS | 73 | 57 | 5.19 | 5.52 |
| | IS4470_1 | 3 | Telecom. & Security | 40 | 36 | 5.50 | 5.56 |
| 2007 | | | | | | | |
| Spring | IS4410_1 | 3 | Intro to MIS | 79 | 70 | 5.53 | 5.69 |
| | IS4410_70 | 3 | Intro to MIS | 42 | 39 | 5.55 | 5.70 |
| | IS4470_1 | 3 | Telecom. & Security | 31 | 29 | 5.60 | 5.79 |
| | ACC6520_1 | 3 | Computer Security [†] | 16 | 14 | 5.87 | 5.59 |

| | | | | | | | |
|-------------|---------------|--------------|--|-----------------|------------------|-------------------------|-------------------------|
| | IS5910_01 | 3 | Advanced IT Security | 1 | 1 | 6.00 | 6.00 |
| Fall | IS4410_3 | 3 | Intro to MIS | 105 | 96 | 5.53 | 5.68 |
| | IS4410_4 | 3 | Intro to MIS | 72 | 66 | 5.52 | 5.68 |
| | IS4470_1 | 3 | Telecom. & Security | 69 | 65 | 5.64 | 5.72 |
| 2008 | | | | | | | |
| Spring | IS4410_2 | 3 | Intro to MIS | 93 | 79 | 5.27 | 5.51 |
| | IS4410_70 | 3 | Intro to MIS | 29 | 27 | 5.73 | 5.75 |
| | IS4470_1 | 3 | Telecom. & Security | 62 | 52 | 5.54 | 5.61 |
| | ACC6520_1 | 3 | Computer Security | 41 | 36 | 5.68 | 5.73 |
| Fall | IS4410_4 | 3 | Intro to MIS | 55 | 44 | 5.40 | 5.59 |
| | IS4410_5 | 3 | Intro to MIS | 67 | 52 | 5.26 | 5.67 |
| | IS4440_1 | 3 | Networking & Servers [†] | 62 | 51 | 5.60 | 5.74 |
| | ACC6520_1 | 3 | Computer Security | 30 | 27 | 5.49 | 5.61 |
| | IS5910_1 | 3 | Computer Security | 13 | 9 | 5.60 | 5.76 |
| 2009 | | | | | | | |
| Spring | IS4410_1 | 3 | Intro to MIS | 68 | 56 | 5.46 | 5.62 |
| | IS4410_2 | 3 | Intro to MIS | 95 | 80 | 5.63 | 5.73 |
| | IS4440_1 | 3 | Networking & Servers | 51 | 42 | 5.71 | 5.83 |
| | IS6910_1 | 3 | Networking & Servers | 5 | 4 | 6.0 | 6.0 |
| | IS6910_4 | 1.5 | IT Certification | 1 | 1 | 6.0 | 6.0 |
| | IS5910_1 | 3 | Ind. Study Networking | 1 | 1 | 6.0 | 6.0 |
| Fall | IS4410_1 | 3 | Intro to MIS | 189 | 143 | 5.27 | 5.55 |
| | IS4440_1 | 3 | Networking & Servers | 75 | 64 | 5.56 | 5.62 |
| | IS6910_1 | 3 | Networking & Servers | 5 | - | - | - |
| | IS4470_1 | 3 | IT Security | 56 | 50 | 5.84 | 5.88 |
| | IS6570_1 | 3 | IT Security | 35 | 29 | 5.72 | 5.86 |
| Term | Course | Hours | University of Utah Course Title | Enrolled | Responded | Course Score | Instr. Score |

| | | | | | | | |
|-------------|------------------------|--------------|--|-----------------|------------------|-------------------------|-------------------------|
| 2010 | | | | | | | |
| Spring | IS4440_1 | 3 | Networking & Servers | 66 | 55 | 5.66 | 5.80 |
| | IS6910_1 | 3 | Networking & Servers | 2 | 2 | 6.00 | 6.00 |
| | IS4470_1 | 3 | IT Security | 44 | 37 | 5.72 | 5.87 |
| | IS6570_1 | 3 | IT Security | 23 | 20 | 5.50 | 5.67 |
| Fall | IS4410_1 | 3 | Intro to MIS | 140 | 106 | 5.50 | 5.67 |
| | IS4440_1 | 3 | Networking & Servers | 75 | 60 | 5.73 | 5.83 |
| | IS6910_1 | 3 | Networking & Servers | 3 | 3 | 6.00 | 6.00 |
| | IS4470_1 | 3 | IT Security | 35 | 30 | 5.82 | 5.87 |
| | IS6570_1 | 3 | Computer Security | 35 | 20 | 5.51 | 5.57 |
| Term | Course | Hours | University of Utah Course Title | Enrolled | Responded | Course Score | Instr. Score |
| 2011 | | | | | | | |
| Spring | IS4410_1 | 3 | Intro to MIS | 96 | 76 | 5.33 | 5.53 |
| | IS4440_1 | 3 | Networking & Servers | 43 | 34 | 5.67 | 5.69 |
| | IS6910_1 | 3 | Networking & Servers | 2 | 2 | 6.00 | 6.00 |
| | IS4470_1 | 3 | IT Security | 36 | 34 | 5.80 | 5.88 |
| | IS6570_1 | 3 | Computer Security | 29 | 24 | 5.78 | 5.80 |
| Fall | IS4410_1 | 3 | Intro to MIS | 139 | 119 | 5.7 | 5.8 |
| | IS4440_1 | 3 | Networking & Servers | 69 | 67 | 5.7 | 5.8 |
| | IS6910_1 | 3 | Networking & Servers | 6 | †† | 5.7 | 5.8 |
| | IS6910_2 | 1.5 | CompTIA Certification | 5 | - | - | - |
| | IS4470_1 | 3 | IT Security | 48 | 66 | 5.7 | 5.8 |
| | IS6570_1 | 3 | Computer Security | 27 | †† | 5.7 | 5.8 |
| 2012 | | | | | | | |
| Spring | IS4410_1 | 3 | Intro to MIS | 95 | 83 | 5.57 | 5.73 |
| | IS4440_1 (IS6640_1) | 3 | Networking & Servers | 54 (34) | 72 | 5.86 | 5.88 |

| | IS4470_1 (IS6570_1) | 3 | IT Security | 39 (31) | 59 | 5.81 | 5.83 |
|----------------------------|------------------------|-------|-------------------------------------|----------|-----------|---------------------------------|------|
| Longwood University | | | | | | | |
| Term | Course | Hours | Longwood University Course Title | Enrolled | Responded | Instr. Score (mean Q1 - Q10) | |
| Fall | ISYS370 | 3 | Intro to IS | 26 | 18 | 4.89 | |
| | ISYS376 | 3 | Cyber Security | 12 | 10 | 4.98 | |
| | ISYS476 | 3 | Advanced Cyber Security† | 5 | 2 | 5.0 | |
| 2013 | | | | | | | |
| Spring | ISYS370 | 3 | Intro to IS | 58 | 35 | 4.83 | |
| | ISYS473 | 3 | Network Comm. | 14 | 9 | 5.0 | |
| Summer | ISYS492 | 1-3 | IS Security Internship | 4 | - | - | |
| Fall | ISYS370 | 3 | Intro to IS | 43 | 19 | 4.87 | |
| | ISYS376 | 3 | Cyber Security | 19 | 7 | 4.8 | |
| | ISYS476 | 3 | Advanced Cyber Security | 5 | 1 | 5.0 | |
| | ISYS492 | 1-3 | IS Security Internship | 2 | - | - | |
| 2014 | | | | | | | |
| Spring | ISYS370 | 3 | Intro to IS | 29 | 14 | 4.71 | |
| | ISYS473 | 3 | Network Comm. | 20 | 9 | 4.88 | |
| | ISYS376 | 3 | Cyber Security | 20 | 10 | 4.89 | |
| Summer | ISYS492 | 1-3 | IS Security Internship | 6 | - | - | |
| Fall | ISYS370 | 3 | Intro to IS | 49 | 19 | 4.97 | |
| | ISYS376 | 3 | Cyber Security | 20 | 5 | 4.96 | |
| | ISYS473 | 3 | Network Comm. | 8 | 2 | 4.89 | |
| 2015 | | | | | | | |
| Spring | ISYS370 | 3 | Intro to IS | 33 | 12 | 4.87 | |
| | ISYS376 | 3 | Cyber Security | 20 | 10 | 4.97 | |
| | ISYS473 | 3 | Network Comm. | 24 | 7 | 4.86 | |

| Summer | ISYS492 | 1-3 | IS Security Internship | 2 | - | - |
|-------------------------------|---------|-------|-------------------------------|----------|-----------|-------------------|
| Weber State University | | | | | | |
| Term | Course | Hours | WSU Course Title | Enrolled | Responded | Instr. Score |
| Fall | IST3110 | 3 | Business IT | 23 | 14 | 6.43 |
| | IST3610 | 3 | Networking I | 8 | 7 | 6.57 |
| | IST4600 | 3 | Information Security I | 14 | 10 | 7.00 |
| | | | | | | |
| 2016 | | | | | | |
| Spring | IST3110 | 3 | Business IT | 31 | 23 | 6.30 |
| | IST3110 | 3 | Business IT | 27 | 12 | 6.92 |
| | IST3610 | 3 | Networking I | 14 | 12 | 7.00 |
| Summer | | | | | | |
| Fall | IST2020 | 3 | Intro. To Information Systems | 47 | 31 | 6.74 |
| | IST3610 | 3 | Networking I | 23 | 15 | 7.00 |
| | IST4600 | 3 | Information Security I | 30 | 19 | 6.89 |
| | MBA6640 | 3 | Information Assurance | 2 | 1 | 5.00 ⁷ |
| | | | | | | |
| 2017 | | | | | | |
| Spring | IST2020 | 3 | Intro. To Information Systems | 36 | 31 | 6.42 |
| | IST3610 | 3 | Networking I | 17 | 11 | 7.00 |
| | IST4600 | 3 | Information Security I | 14 | 7 | 7.00 |
| | MBA6640 | 3 | Information Assurance | 4 | * | * |
| | MBA6630 | 3 | Networking & IS | 6 | * | * |
| Summer | | | | | | |
| Fall | IST2020 | 3 | Intro. To Information Systems | 60 | | |
| | IST3610 | 3 | Networking I | 19 | | |
| | IST4600 | 3 | Information Security I | 16 | | |
| | MBA6640 | 3 | Information Assurance | | | |

| | | | | | | |
|-------------|---------|---|-------------------------------|--|--|--|
| | MBA6630 | 3 | Networking & IS | | | |
| 2018 | | | | | | |
| Spring | IST2020 | 3 | Intro. To Information Systems | | | |
| | IST3610 | 3 | Networking I | | | |
| | IST4600 | 3 | Information Security I | | | |
| | MBA6640 | 3 | Information Assurance | | | |
| | MBA6630 | 3 | Networking & IS | | | |
| | | | | | | |

† Indicates a new prep.

†† Included with scores of the prior cross-listed course.

1. **Florida State University** (FSU) uses a rating system from 1 to 5, with one being the highest. For consistency they have been reverse coded to match the rest of the scores using a rating scale from 5 to 1, with five being the highest.
2. **University of Alabama in Huntsville** (UAH) uses a rating system from 1 to 5, with five being the highest. UAH College averages were as follows: (2003) Fall 4.26, (2003) Spring 4.35.
3. Global Item #20 reads as follows: "This instructor was among the A: top 10%, B: top 30%, C: About Average, D: Bottom 30%, E: Bottom 10%"
4. **University of Utah** (UofU) uses a rating system from 1 to 6, with six being the highest.
5. **Longwood University** uses a rating system from 1 to 5, with five being the highest.
6. **Weber State University** uses a rating system from 1 to 7, with seven being the highest (Question #11).
7. **MBA** classes at **Weber State University** use a rating system from 1 to 5, with one being the highest (Question #14). For consistency, this value was recoded with one being low, and five being high.
8. Detailed Student Instructor Evaluations (SIE) with more comprehensive breakdowns for each course and open-ended responses are available.

Cyber Security

Chapter 1: DOS Commands

- 1.1 DOS Basics
- 1.2 IPconfig
- 1.3 Ping
- 1.4 Tracert
- 1.5 Netstat
- 1.6 Nslookup
- 1.7 FTP
- 1.8 PowerShell
- 1.9 Hashing
- 1.10 Sdelete

Chapter 2: Windows Security

- 2.1 Local Security Policy
- 2.2 Windows Firewall
- 2.3 Configuring Backup
- 2.4 Windows Update
- 2.5 User Management
- 2.6 Shadowing
- 2.7 Malicious Software Removal Tool

Chapter 3: Web Security

- 3.1 Web browser History
- 3.2 Cookies
- 3.3 Tracking (Ghostery)
- 3.4 Anonymous Browsing
- 3.5 Web Proxy
- 3.6 Adblock Plus
- 3.7 HTTPS Everywhere
- 3.8 Flagfox
- 3.9 Web of Trust (WOT)
- 3.10 Onion Routing (Tor)

Chapter 4: Porn & Spam Filters

- 4.1 K-9
- 4.2 Email Filter (Outlook)
- 4.3 Block Senders (Outlook)
- 4.4 Junk Email (Hotmail)

Chapter 5: Monitoring Software

- 5.1 Refog Keylogger
- 5.2 Spector 360
- 5.3 Untangle
- 5.4 Prey

Chapter 6: Password Auditors

- 6.1 John the Ripper (JtR)

- 6.2 Local Password Audit
- 6.3 Free Word & Excel Password Recovery
- 6.4 Cain & Able (passwords)
- 6.5 Default Passwords
- 6.6 Password Evaluator
- 6.7 Password Generators
- 6.8 Rainbow Tables
- 6.9 RainbowCrack

Chapter 7: Wireless

- 7.1 Wi-Fi Inspector
- 7.2 inSSIDer
- 7.3 WiFIDenum
- 7.4 WiGLE.net
- 7.5 Ekahau HeatMapper

Chapter 8: Security Readings

- 8.1 The Register, eWeek, & ComputerWorld
- 8.2 Sans & Security Policies
- 8.3 Ponemon Institute & PWC

Chapter 9: Information Gathering

- 9.1 Trace Route to the Source
- 9.2 Trace a Phone Number
- 9.3 Whois Lookup to Source Network
- 9.4 Locate an IP Address Source
- 9.5 Locate an Email Source
- 9.6 Sam Spade

Chapter 10: Packet Sniffer

- 10.1 Packet Capture (Wireshark I)
- 10.2 Capture web traffic (Wireshark II)
- 10.3 Capture an email (Wireshark III)
- 10.4 Simple filtering (Wireshark IV)
- 10.5 CLI Packet Sniffing (windump)

Chapter 11: Port & Vulnerability

Scanners

- 11.1 PortQry
- 11.2 Nmap (Zenmap)
- 11.3 Advanced IP Scanner
- 11.4 Nessus
- 11.5 AppScan
- 11.6 Shields Up

Chapter 12: Honeypots and IDS

- 12.1 HoneyBOT
- 12.2 NST, Snort (IDS), & BASE
- 12.3 Snorby

Chapter 13: File Integrity Checkers & System Monitors

- 13.1 HashCalc

- 13.2 Process Monitor (FILEMON)
- 13.3 File Verifier++
- 13.4 Windows Event Viewer (logs)
- 13.5 Snare for Windows

Chapter 14: Alternate Data Streams

- 14.1 Create a Simple ADS
- 14.2 ADS Part 2
- 14.3 ADS Spy

Chapter 15: Data Recovery & Secure Deletion

- 15.1 File recovery (Recuva)
- 15.2 Secure Deletion (Eraser)
- 15.3 Clean Up (CCleaner)
- 15.4 Disk Wipe

Chapter 16: Cryptography

- 16.1 LockNote
- 16.2 AxCrypt
- 16.3 Compress and Encrypt
- 16.4 Enigma
- 16.5 TrueCrypt
- 16.6 CrypTool
- 16.7 Encrypted USB
- 16.8 Encrypted Email
- 16.9 Encrypted Webmail

Chapter 17: Steganography

- 17.1 Digital Watermarking
- 17.2 Invisible Secrets 2.1
- 17.3 Stegdetect
- 17.4 OpenPuff

Chapter 18: Forensics

- 18.1 BGInfo
- 18.2 Nigilant32
- 18.3 Metadata (Tagview)
- 18.4 CAINE
- 18.5 AccessData Forensic Toolkit

Chapter 19: Application Security

- 19.1 Installing WebGoat
- 19.2 Concurrency Errors
- 19.3 Cross-Site Scripting
- 19.4 Authentication Errors
- 19.5 SQL Injection

Chapter 20: Linux Primer

- 20.1 Linux Installation (Fedora)
- 20.2 Command-Line Primer (Fedora)
- 20.3 Software Installation (Ubuntu)

- 20.4 Net-Tools and Networking commands (Ubuntu)
- 20.5 System Tools and Configuration (Ubuntu)
- 20.6 User and Group Management (Mint)
- 20.7 Network CLI Utilities (Mint)
- 20.8 File CLI Utilities (Mint)
- 20.9 Tcpdump (PC-BSD)
- 20.10 Netcat (PC-BSD)
- 20.11 Hping (PC-BSD)
- 20.12 Portable Linux (Debian)

Chapter 21: Web Servers

- 21.1 Install Apache, Create a Web site, and Host Pages
- 21.2 Internet Information Server (IIS)
- 21.3 Phishing And Hosts File
- 21.4 Authentication, limits, and blocking
- 21.5 Request Filtering & Logs

Chapter 22: Utilities & Other

- 22.1 Portable Applications
- 22.2 Remote Desktop
- 22.3 Process Explorer
- 22.4 Change MAC Address
- 22.5 Binders (IExpress)
- 22.6 Buffer Overflow
- 22.7 File Splitter

Chapter 23: Intermediate & Advanced

- 23.1 Kali (BackTrack) (Metasploit, Maltego)
- 23.2 Kali II (fuzzers-bed, fingerprinting-whatweb, vulnerability testing-lynis)
- 23.3 Cain & Able (Part 2)
- 23.4 USB Lock (Predator)
- 23.5 Whole Disk Encryption (TrueCrypt)

Chapter 24: Mobile Security

- 24.1 Screenshot (DroidatScreen)
- 24.2 Mobile Security (Lookout)
- 24.3 Waredriving (Wigle Wifi)
- 24.4 Tethering
- 24.5 Mobile Net Tools (Fing)
- 24.6 Encrypted Calls (PrivateGSM)
- 24.7 Encryption (File Locker)

Networking & Servers

Chapter 1: DOS Commands

- 1.1 DOS Basics
- 1.2 IPconfig
- 1.3 Ping
- 1.4 Tracert & Pathping
- 1.5 Netstat
- 1.6 Nslookup
- 1.7 ARP
- 1.8 Net
- 1.9 FTP
- 1.10 Batch Files
- 1.11 PowerShell

Chapter 2: Windows Utilities

- 2.1 Windows Task Manager
- 2.2 Windows Remote Desktop
- 2.3 MSINFO32
- 2.4 BGInfo
- 2.5 Perfmon
- 2.6 Windows Event Viewer
- 2.7 Process Explorer
- 2.8 Process Monitor
- 2.9 Text Editor (Notepad)
- 2.10 Backup and Recovery
- 2.11 Hardware Driver Updates
- 2.12 MSConfig
- 2.13 IExpress

Chapter 3: Web Tools

- 3.1 Bandwidth Speed Test
- 3.2 Visual Trace Route
- 3.3 WHOIS Lookup
- 3.4 Using a Web Proxy
- 3.5 Web Hosting Statistics
- 3.6 Online Virus Scan
- 3.7 Email Trace
- 3.8 HTTPS Everywhere

- 3.9 Flagfox

Chapter 4: Virtualization

- 4.1 Oracle VirtualBox (OpenSUSE)
- 4.2 Microsoft Virtual PC (PCLinuxOS)
- 4.3 Microsoft Server 2008 (virtualized)
- 4.4 Portable Applications
- 4.5 Bootable USB (Debian)

Chapter 5: Packet Analysis

- 5.1 Wireshark Installation
- 5.2 Traffic Capture
- 5.3 Packet Inspection
- 5.4 Contents of a Packet (Capture an Email)
- 5.5 Packet Filtering (Display Filter)
- 5.6 Packet Analysis and Reporting

Chapter 6: Network Design

- 6.1 IP Addressing
- 6.2 Network Media
- 6.3 Simple LAN Design (OPNET)
- 6.4 Network Expansion & Testing
- 6.5 Configuration Scenario
- 6.6 Cabling Scenarios
- 6.7 Switch, Router, & Hub Scenarios

Chapter 7: Wireless

- 7.1 Wi-Fi Inspector
- 7.2 InSSIDer
- 7.3 WiGLE.net
- 7.4 Ekahau HeatMapper

Chapter 8: IIS

- 8.1 Internet Information Server (IIS) Installation
- 8.2 Basic HTML Tutorial
- 8.3 Create a Website
- 8.4 Host a Website
- 8.5 Multiple Web Sites & Hosts File
- 8.6 Authentication & Limits
- 8.7 Request Filtering & Logs

Chapter 9: Apache

- 9.1 Apache Installation & Setup
- 9.2 Apache Command-Line & Benchmarking

- 9.3 Configuration File (httpd.conf)
- 9.4 Host Multiple Web Sites (Virtual Hosts)

Chapter 10: Windows Server 2008

- 10.1 Server Manager
- 10.2 Active Directory
- 10.3 Group Policies
- 10.4 Security Policies & Auditing
- 10.5 FTP Server

Chapter 11: Windows Server 2012

- 11.1 Windows Server 2012 vm
- 11.2 Server Manager
- 11.3 Active Directory
- 11.4 Group Policies
- 11.5 Security Policies and Auditing
- 11.6 FTP Server

Chapter 12: Linux

- 12.1 Installation (Fedora)
- 12.2 Command-line Primer (Fedora)
- 12.3 Software Installation (Ubuntu)
- 12.4 Net-Tools & Networking Commands (Ubuntu)
- 12.5 System Tools and Configuration (Ubuntu)
- 12.6 User and Group Management (Mint)
- 12.7 Network CLI Utilities (Mint)
- 12.8 Tcpdump (PC-BSD)

Conceptual

- 13.1 OSI Stack & TCP/IP
- 13.2 TCP, UDP, ICMP Structures
- 13.3 Firewalls, PKI, Encryption
- 13.4 Network Design
- 13.5 Physical Layer Propagation
- 13.6 Switched Networks
- 13.7 WLAN Standards
- 13.8 VPNs, VoIP, Cloud, SOA, P2P
- 13.9 IPv4 Subnetting

Advanced Cyber Security

General

1. [WebGoat](#)
2. [WebScarab](#)
3. HTTP Basics
4. HTTP Splitting

Access Control Flaws

1. Using an Access Control Matrix
2. Bypass a Path Based Access Control Scheme
3. Role based Access Control
4. Bypass Business Layer Access Control
5. Add Business Layer Access Control
6. Bypass Data Layer Access Control
7. Add Data Layer Access Control
8. Remote Admin Access

AJAX Security

1. Same Origin Policy Protection
2. DOM-Based cross-site scripting
3. Client Side Filtering
4. DOM Injection
5. XML Injection
6. JSON Injection
7. Silent Transactions Attacks
8. Dangerous Use of [Eval](#)
9. Insecure Client Storage

Authentication Flaws

1. Password Strength
2. Forgot Password
3. Basic Authentication
4. Multi-Level Logins

Buffer Overflows

1. Off-by-One Overflows

Code Quality

1. Discover Clues in the HTML

Concurrency

1. Thread Safety Problems
2. Shopping Cart Concurrency Flaw

Cross-Site Scripting (XSS)

1. Phishing with XSS
2. Cross Site Scripting
3. Stored XSS
4. Block Stored XSS using Input Validation
5. Stored XSS Revisited
6. Block Stored XSS using Output Encoding
7. Reflected XSS
8. Block Reflected XSS
9. Stored XSS Attacks
10. Reflected XSS Attacks
11. Cross Site Request Forgery (CSRF)
12. CSRF Prompt By-Pass
13. CSRF Token By-Pass
14. [HTTPOnly](#) Test
15. Cross Site Tracing (XST) Attacks

Improper Error Handling

1. Fail Open Authentication Scheme

Injection Flaws

1. Command Injection
2. Numeric SQL Injection
3. Log Spoofing
4. XPATH Injection
5. String SQL Injection

SQL Injection

1. String SQL Injection
2. Parameterized Queries
3. Numeric SQL Injection

4. Modify Data with SQL Injection
5. Add data with SQL Injection
6. Database Backdoors
7. Blind Numeric SQL Injection
8. Blind String SQL Injection

Denial of Service

1. Denial of Service From Multiple Logins

Insecure Communication

1. Insecure Login

Insecure Configuration

1. Forced Browsing

Insecure Storage

1. Encoding Basics

Malicious Execution

1. Malicious File Execution

Parameter Tampering

1. Bypass HTML field Restrictions
2. Exploit Hidden Fields
3. Exploit Unchecked Email
4. Bypass Client Side JavaScript Validation

Session Management Flaws

1. Hijack a Session
2. Spoof an Authentication Cookie
3. Session Fixation

Web Services

1. Create a SOAP Request
2. WSDL Scanning
3. Web Service SAX Injection
4. Web Service SQL Injection