

Hayden Wimmer, Ph.D.

Associate Professor (with Tenure Aug 2019)
Information Technology
Georgia Southern University
<http://www.ninjabprofessor.com>
<http://www.daclab.net>
<https://cec.georgiasouthern.edu/it/faculty/hayden-wimmer/>
hayden.wimmer@gmail.com, hwimmer@georgiasouthern.edu

Education

Ph.D. Information Systems	University of Maryland Baltimore County (UMBC)	2013
M.S. Information Systems	University of Maryland Baltimore County (UMBC)	2011
M.B.A. Information Systems	Pennsylvania State University	2006
B.S. Information Systems	York College of PA	1999

Publications

Select Journal Publications

- Wimmer, Aasheim, C., Examining Factors that Influence Intent to Adopt Data Science, *Journal of Computer Information Systems*, vol. 59, no.1, 2019
- Wimmer, H., Yoon, V., Counterfeit Product Detection: Bridging the Gap between Design Science and Behavioral Science in Information Systems Research, *Decision Support Systems*, December 2017
- Hendon, M., Powell, L., Wimmer, H., “Emotional intelligence and communication levels in information technology professionals”, *Computers in Human Behavior*, Vol. 71 June 2017
- Narock, T., Wimmer, H., “Linked data scientometrics in semantic e-Science”, *Computers and Geosciences*, Vol. 100, March 2017
- Wimmer, H., Yoon, V. Y., & Sugumaran, V. “A multi-agent system to support evidence based medicine and clinical decision making via data sharing and data privacy.” *Decision Support Systems*, Vol. 8, Aug. 2016
- Wimmer, H., Rada, R. “Good versus bad knowledge: Ontology guided evolutionary algorithms”, *Expert Systems with Applications*, Vol. 42, No. 21, 2015

All Journal Publications

1. Rebman, C., Booker, Q., Wimmer, H., Levkoff, S., McMurtrey, M., Powell, L., (2023). An Industry Survey of Analytics Spreadsheet Tools Adoption: Microsoft Excel vs Google Sheets. *Information Systems Education Journal* 21(5) pp 29-42. <http://ISEDJ.org/2023-5/> ISSN : ISSN: 1545-679X.
2. Wimmer, H., Du, J., Heri, P., (2023). Text Prediction Using Artificial Intelligence: An Analysis of Two Text Prediction Systems. *Journal of Information Systems Applied Research* 16(1) pp 4-12. <http://JISAR.org/2023-1/> ISSN : 1946 - 1836
3. Brison, R., Wimmer, H., & Rebman Jr, C. M. (2022). Botnet intrusion detection: A modern architecture to defend a virtual private cloud. *Issues in Information Systems*, 23(3).

4. Bui, N., Moore, Z., Wimmer, H., & Pham, L. (2022). Predicting Customer Loyalty in the Mobile Banking Setting: An Integrated Approach. *International Journal of E-Services and Mobile Applications (IJESMA)*, 14(1), 1-22
5. Brinson, R. Wimmer, H., Booker, Q., Security Analysis of the Amazon Echo Dot, *Issues in Information Systems*. Vol 22 No 3 2021
6. Edbedion, B, Wimmer, H., Rebman, C., Exploring Blockchain Performance With Cpuheavy Microbenchmark On Smart Contracts, *Issues in Information Systems*. Vol 22 No 1 2021
7. Powell, L., Hendon, M, Mangle, A., Wimmer, H., Awareness Of Blockchain Usage, Structure, & Generation Of Platform's Energy Consumption: Working Towards A Greener Blockchain, *Issues in Information Systems*. Vol 22 No 1 2021
8. Aliyu, F., Wimmer, H., Powell, L., Rebman, C., An International Review and Study on Perceptions of Security, Adoption, and Implementation of Electronic Health Records, *Journal of Applied Information Systems Research*, Vol 14. No 4, Dec 2021
9. Patel, N, Wimmer. H., Powell, L., Defense and Analysis of Hijacking User Login Credentials via Remote Code Execution and Raspberry PI, *Journal of Applied Information Systems Research*, Vol 14, No. 3, September 2021
10. Rebman, C., White, G., Wimmer, H., Powell, L., Booker, Q., Pandemic Shift: Impact of Covid-19 on IS/Microsoft Office Specialist Excel Certification Exam Classes: Remote Testing and Lessons Learned, *Information Systems Education Journal*, Vol 19, No 6, Dec 2021
11. Powell, L., Hendon, M., Mangle, A., Wimmer, H., Awareness of block chain usage, structure, & generation of platform's energy consumption: working towards a greener block chain, *Issues in Information Systems*, Vol 22. No 1, March 2021
12. Patel, N., Wimmer, H., Powell, L., PHPBB3 Bulletin Board Security Testing, *Issues in Information Systems*, Vol. 21, No 2, 2020
13. George, A., Wimmer, H., Rebman, C., Artificial Intelligence Facial Expression Recognition for Emotion Detection: Performance and Acceptance, *Issues in Information Systems*, Vol. 21, No 4, 2020
14. Booker, Q., Rebman, C., Wimmer, H., A Comparative Analysis of Business and Non-Business Student Awareness of IoT Devices and Security Practices, An Exploratory Study. *Issues in Information Systems*, Vol. 21, No 4, 2020
15. Herman, K., Wimmer, H., Rebman, C., An Exploratory Study of the Perceptions of Library Faculty and Patrons on Library Resources, *Journal of Information Systems Applied Research*, Vol. 13, No 2, 2020
16. Edbedion, B., Wimmer, H., Rebman, C., Powell, L., Examining a Deep Learning Network System for Image Identification and Classification for Preventing Unauthorized Access for a Smart Home Security System, *Issues in Information Systems*, Vol. 20 No 3, 2019
17. Carrie, B., Wimmer, H., Powell, L., Rebman, C., Cyber-Security Instructional Technology Design, *Issues in Information Systems*, Vol. 20 No 3, 2019
18. Powell, L., Wimmer, H., Rebman, C., Abdul, C., Learner Security & Privacy Risks: How Usage of Online Social Media Outside a Learning Management Systems Affects Learners' Digital Identity, *Issues in Information Systems*, Vol. 20 No 4, 2019
19. Wimmer, Aasheim, C., Examining Factors that Influence Intent to Adopt Data Science, *Journal of Computer Information Systems*, vol. 59, no.1, 2019

20. Du, J., Wimmer, H., Hour of Code: A Study of Gender Differences in Computing, *Information Systems Education Journal*, vol. 17. No 4, 2019,
21. Adeyemo, A., Wimmer, H., Powell, L., Effects of Normalization Techniques on Logistic Regression in Data Science, *Journal of Information Systems Applied Research*, 2019,
22. Du, J., Wimmer, H., Rada, R., Knowledge Portals: A Review, *International Journal of Knowledge Management*, vol. 15, no. 1, 2019
23. Wimmer, H., Chen, L., Narock, T., Ontologies and the Semantic Web for Digital Investigation Tool Selection, *Journal of Digital Forensics, Security, and Law*, vol. 13, no 3, 2018
24. Booker, Q., Kitchens, F., Wimmer, H., & Rebman, C., Using Geodesic Acceleration with LevMar to Maximize Smart Home Energy Management. *Journal of Strategic Innovation and Sustainability*, 13(4). 2018
25. Cuk, S., Wimmer, H., Powell, L., Rebman, C., Electronic Emergency Medical Technician Reports –Testing A Perception Of A Prototype, *Issues in Information Systems*, Volume 19, Issue 3, pp. 81-91, 2018
26. Sachdev, H., Wimmer, H., Chen, L., A New Framework for Securing, Extracting and Analyzing Big Forensic Data, *Journal of Digital Forensics, Security, and Law*, vol. 13, no. 2, 2018
27. Egbedion, B., Wimmer, H., Rebman, C., Powell, L., Building An Application For Custom Mobile Medication Reminder In Healthcare: An Exploratory Study, *Issues in Information Systems*, Volume 19, Issue 3, pp. 139-149, 2018
28. Don, T., Wimmer, H., Chen, L., Booker, Q., Exposing The Tor Failures On Mobile Devices Using Paraben's E3:Ds Technology, *Issues in Information Systems*, Volume 19, Issue 1, pp. 58-67, 2018
29. Du, J., Wimmer, H., Rada, R., "Hour of Code": A Case Study, *Information Systems Education Journal*, Vol. 16, No. 1, Feb 2018
30. Wimmer, H., Yoon, V., Counterfeit Product Detection: Bridging the Gap between Design Science and Behavioral Science in Information Systems Research, *Decision Support Systems*, December 2017
31. Wimmer, H., Rebman, C., Booker, Q., "Evaluation of Predictive Analytic Techniques in Healthcare Research: A PRISMA Style Review", *Issues in Information Systems*, Vol. 18., No. 3, 2017
32. Cuk, S., Wimmer, H., Powell, L., "Problems Associated with Patient Care Reports and Transferring Data between Ambulance and Hospitals from the Perspective of Emergency Medical Technicians", *Issues in Information Systems*, Vol. 18., No. 4, 2017
33. Horton, M., Wimmer, H., "Email Phishing Susceptibility in a Public School Setting: Identifying at Risk Educators", *International Journal of Cyber Security and Education (IJCSE)*, Vol 10, No. 1, 2017
34. Powell, L., Wimmer, H., "Parental Perceptions and Recommendations of Computing Majors: A Technology Acceptance Model Approach", *Information Systems Education Journal*, Vol. 15, Issue 4, 2017
35. Powell, L., Wimmer, H., Force, C., Kilgus, L., Impact of Online Discussions on Web Based Assessments, *International Journal of Distance Education Technology (IJDET)*, Vol. 15, Issue, 4, 2017
36. Hendon, M., Powell, L., Wimmer, H., "Emotional intelligence and communication levels in information technology professionals", *Computers in Human Behavior*, Vol. 71 June 2017

37. Narock, T., Wimmer, H., "Linked data scientometrics in semantic e-Science", *Computers and Geosciences*, Vol. 100, March 2017
38. Wimmer, H., Powell, L., Kilgus, L., Force, C., "Improving Course Assessment via Web-based Homework", *International Journal of Online Pedagogy and Course Design (IJOPCD)*, Vol. 7, Issue 2, April-June 2017
39. Powell, L., Wimmer, H., Hendon, M., Choi, J., (April 2017), "Learning Precursor Programming Skills from Free Mobile Application Development Tools", *PAECT: Technology Education Research Journal*, 2017
40. Powell, L., Wimmer, H., Force, C., Kilgus, L., (April 2017), "Key Factors Effecting Career Choice Among Business and Information Technology Students", *PAECT: Technology Education Research Journal*, 2017
41. Rada, R., Wimmer, H., "Decision Trees and Financial Variables." *International Journal of Decision Support Technology*, Vol. 9, No 1, Jan-March 2017
42. Wimmer, H., Yoon, V. Y., & Sugumaran, V. "A multi-agent system to support evidence based medicine and clinical decision making via data sharing and data privacy." *Decision Support Systems*, Vol. 8, Aug. 2016
43. Wimmer, H., Powell L., "A Comparison of Open Source Tools for Data Science", *Journal of Information Systems Applied Research*, Vol. 9, No, 2, Oct. 2016
44. Geyfman, Wimmer, Rada, "The Use Of Accounting Screens For Separating Winners From Losers Among the S&P 500 Stocks", *Journal of Accounting and Finance*, Vol. 16, No. 1, 2016
45. Powell L, Wimmer, H, "Evaluating the Effectiveness of Student Group Work for Mobile Application Development Learning, Productivity, Enjoyment and Confidence in Quality", *Information Systems Education Journal*, Vol 14, No. 3, 85-95, 2016
46. Du, J., Wimmer, H., & Rada, R, "Hour of Code": Can it change students' attitudes toward programming? *Journal of Information Technology Education: Innovations in Practice*, 15, 52-73., 2016
47. Wimmer, H., Hall, K., "A Technical Infrastructure to Integrate Dynamics AX ERP and CRM into University Curriculum", *Information Systems Education Journal (ISEDJ)*, Vol 14 No 1, 2016.
48. Wimmer, H., Rada, R. "Good versus bad knowledge: Ontology guided evolutionary algorithms", *Expert Systems with Applications*, Vol. 42, No. 21, 2015
49. Nguyen, L., Nguyen, Q., Wimmer, H., Powell, L., "Cross-Culture Management: An Empirical Examination on Task and Relationship Orientations of German and Omani", *Journal of International Business and Economics*, Vol. 15, No. 3, 2015
50. Powell, L., Wimmer, H. "Evaluating the Effectiveness of Self-Created Student Screencasts as a Tool to Increase Student Learning Outcomes in a Hands-On Computer Programming Course", *Information Systems Education Journal (ISEDJ)*, Vol 13 No 5, 2015.
51. Wimmer H, Powell, L. "A Comparison of the Effects of K-Anonymity on Machine Learning Algorithms", *International Journal of Advanced Computer Science and Applications*, Vol. 5 No. 1, 2014.
52. Du J, Wimmer H, Rada R. "Knowledge Constrained Evolutionary Algorithms: A Case Study for Financial Investing", *International Journal of Artificial Intelligence and Soft Computing*, Vol. 4 No. 4, 2014.

53. Wimmer, H., V. Yoon, and R. Rada, "Integrating Knowledge Sources: An Ontological Approach," *International Journal of Knowledge Management (IJKM)*, vol. 9, pp. 60-75, 2013.
54. Wimmer, H. and R. Rada, "Applying Information Technology to Financial Statement Analysis for Market Capitalization Prediction," *Open Journal of Accounting*, vol. 2, pp. 1-3, 2013.
55. Wimmer, H., V. Yoon, and R. Rada, "Applying semantic Web technologies to ontology alignment," *International Journal of Intelligent Information Technologies (IJIIT)*, vol. 8, pp. 1-9, 2012.
56. Wimmer, H., G. Forgionne, R. Rada, and V. Yoon, "A Conceptual Model for Knowledge Marts for Decision Making Support Systems," *International Journal of Decision Support System Technology (IJDSST)*, vol. 4, pp. 24-38, 2012.

Conference Proceedings Publications

57. O. Arokodare, H. Wimmer, and J. Du, "Big Data Approach For IoT Botnet Traffic Detection Using Apache Spark Technology". 2023 IEEE 13th Annual Computing and Communication Workshop and Conference (CCWC), 2023
58. S. Jamal, M. Vinmal Cruz, H. Wimmer, "Integration of EEG and Eye Tracking Technology: A Systematic Review", *IEEE Southeast Con, 2023 Forthcoming*
59. Q. Odeniran, H. Wimmer, "JavaScript Frameworks -A Comparative Study". 2023 IEEE IRTM Conference, 2023
60. Jamal, S., Wimmer, H. (2023). Performance Analysis of Machine Learning Algorithm on Cloud Platforms: AWS vs Azure vs GCP. In: Gibadullin, A. (eds) *Information Technologies and Intelligent Decision Making Systems. ITIDMS 2022. Communications in Computer and Information Science*, vol 1821. Springer, Cham. https://doi.org/10.1007/978-3-031-31353-0_5
61. Ukene, Daniel, Hayden Wimmer, and Jongyeop Kim. "Evaluating the Performance of Containerized Webservers against web servers on Virtual Machines using Bombardment and Siege." 2023 IEEE/ACIS 21st International Conference on Software Engineering Research, Management and Applications (SERA). IEEE, 2023.
62. Trawinski, Ian, Hayden Wimmer, and Jongyeop Kim. "Anomaly Detection in Intrusion Detection System using Amazon SageMaker." 2023 IEEE/ACIS 21st International Conference on Software Engineering Research, Management and Applications (SERA). IEEE, 2023.
63. C. Rebman, H. Wimmer, "An Exploratory Study Comparing Zoom and Google Technology As A Group Decision Support System". Southwest DSI Conference, 2023
64. C. Rebman, H. Wimmer, Q. Booker, J. Breese, P. Rogers, M. McMurtrey and . Levkoff, "Faculty Opinions on Student Preparation, Performance, And Evaluations Post Covid". Southwest DSI Conference, 2023
65. Trawinski, A., Wimmer, H., & Oliver, D. (2022, October). Sentiment Based LSTM for Stock Price Prediction: Congress vs General Public. In 2022 International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT) (pp. 885-893). IEEE.
66. Opara, E., Wimmer, H., & Rebman, C. M. (2022, July). Auto-ML Cyber Security Data Analysis Using Google, Azure and IBM Cloud Platforms. In 2022 International Conference on Electrical, Computer and Energy Technologies (ICECET) (pp. 1-10). IEEE.
67. Shalan, A., Reyes, J. E., Wimmer, H., Jain, S., & Hefny, M. (2023). Web Service Credibility Evaluation Methods in Different Application Domains. In *Semantic*

- Intelligence: Select Proceedings of ISIC 2022* (pp. 29-42). Singapore: Springer Nature Singapore.
68. Shalan, A., Reyes, J. E., Wimmer, H., Jain, S., & Hefny, M. (2023). Web Service Credibility Evaluation Methods in Different Application Domains. In *Semantic Intelligence: Select Proceedings of ISIC 2022* (pp. 29-42). Singapore: Springer Nature Singapore.
 69. Adekanmbi, Omotola, Hayden Wimmer, and Atef Shalan. "Semantic Web Ontology for Botnet Classification." *Semantic Intelligence: Select Proceedings of ISIC 2022*. Singapore: Springer Nature Singapore, 2023. 43-54.
 70. Rahman, S. S., Wimmer, H., & Powell, L. (2022, June). Deep Learning: An Empirical Study on Kimia Path24. In *2022 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS)* (pp. 1-9). IEEE.
 71. Brinson, R., Wimmer, H., Rebman, C., Dark Web Forensics: An Investigation of Tracking Dark Web Activity with Digital Forensics. In *2022 Interdisciplinary Research in Technology and Management (IRTM)* (pp. 1-8). IEEE.
 72. Adakanmbe, O, Wimmer, H., Kim, J., Big Cyber Security Data Analysis with Apache Mahou. In *2022 IEEE/ACIS 20th International Conference on Software Engineering Research, Management and Applications (SERA)* (pp. 83-90). IEEE.
 73. Kim, S., Wimmer, H., Kim, J., Analysis of Deep Learning Libraries: Keras, PyTorch, and MXnet. In *2022 IEEE/ACIS 20th International Conference on Software Engineering Research, Management and Applications (SERA)* (pp. 54-62). IEEE.
 74. Grone, S., Tong, W., Wimmer, H., & Xu, Y. (2021, December). Arbitrage Behavior amongst Multiple Cryptocurrency Exchange Markets. In *2021 International Conference on Computational Science and Computational Intelligence (CSCI)* (pp. 527-532). IEEE.
 75. Kim, J., Wimmer, H., Liu, H., & Kim, S. (2021, September). A Streaming Data Collection and Analysis for Cryptocurrency Price Prediction using LSTM. In *2021 IEEE/ACIS 6th International Conference on Big Data, Cloud Computing, and Data Science (BCD)* (pp. 45-52). IEEE.
 76. Kim, J., Kim, S., Wimmer, H., & Liu, H. (2021, September). A Cryptocurrency Prediction Model Using LSTM and GRU Algorithms. In *2021 IEEE/ACIS 6th International Conference on Big Data, Cloud Computing, and Data Science (BCD)* (pp. 37-44). IEEE.
 77. Trawinski, A., Wimmer, H., & Tong, W. (2021, October). Deep Learning on Cryptocurrency-Challenges Processing GPU and CPU Architectures. In *2021 IEEE 12th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON)* (pp. 0371-0377). IEEE.
 78. Tigner, M, Wimmer, H., Rebman, C., Analysis of Kali Linux Penetration Testing Tools: A Survey of Hacking Tools, IEEE ICECET, December 2021
 79. Patel, N., Wimmer, H., Rebman, C., Investigating Bluetooth Vulnerabilities to Defend from Attacks, IEEE ISMSIT 2021
 80. Tigner, M., Wimmer, H., Rebman, C., Windows Reverse TCP Attack: The Threat of Out-of-Date Machinery, IEEE ISMSIT 2021
 81. Tigner, M., Wimmer, H., Disruption and Protection of Online Synchronous Learning Environments via 802.11 Manipulation, IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS), 2021

82. Islam, M. A., Wimmer, H., & Rebman, C. M. (2021). Examining Sigmoid vs ReLu Activation Functions in Deep Learning. In *Interdisciplinary Research in Technology and Management* (pp. 432-437). CRC Press.
83. Patel, N, Wimmer, H., Powell, L., Documenting the Process of Hijacking a Raspberry Pi User Login Credentials via Remote Code Execution, Conference on Information Systems Applied Research CONISAR 2020
84. Herman, K., Wimmer, H., Rebman, C., Crosswalking electronic thesis dissertations metadata towards an integrated library database, SWDSI 2020
85. Rahman, S., Wimmer, H., Rebman, C., Improving the predictive performance of the c4.5 decision tree algorithm for categorical medical data, SWDSI 2020
86. Rebman, C., Wimmer, H. Faculty opinions on student preparation, performance, and evaluations SWDSI 2019
87. Aliyu, F, Wimmer, H., Rebman, C., Powell, L., An International Review and Study on Perceptions of Security, Adoption, and Implementation of Electronic Health Records, CONISAR 2020
88. Nwanko, C., Wimmer, H., Chen, L., Kim, J., Text Classification of Digital Forensic Data, IEEE IEMCON 2020
89. Chen, L., Wimmer, H., Yang, M., Wilbert, B., A Practical Low-Cost Security Solution for Log Management and File Integrity Monitoring, IEEE MobiMedia 2020
90. Townsend, M., Wimmer, H., Du, J., Barriers and Drivers to Adoption of Cloud Infrastructure Services: A Security, 2020 IEEE International IOT, Electronics and Mechatronics Conference (IEMTRONICS), 2020
91. Fatima, A., Wimmer, H., Aasheim, C., Predictive Analytics using Machine Learning for Electronic Health Records, SEDSI, March 2020
92. Du, J., Wimmer, H., Impact of Hour of Code: A Five Year Study, Americas Conference on Information Systems (AMCIS), August 2019
93. Mendoza, T., Wimmer, H., Rebman, C., An Exploratory Study on Variances in Perceptions of Smart Home Technologies, ISECON, 2018 –*Best Paper Award*
94. Rebman, C., Wimmer, H., Booker, Q., A Nationwide Exploratory Study on Faculty Opinions on Student Preparation Performance, and Evaluations, EDSIG Con, 2018
95. White, G., Wimmer, H., Rebman, C., & Nwankwo, C. (2018). Using Twitter Sentiment Analysis to Analyze Self-Sentiment of the POTUS. In *Proceedings of the Conference on Information Systems Applied Research* ISSN (Vol. 2167, p. 1508).
96. Overstreet, D., Wimmer, H., Haddad, R., Penetration Testing of the Amazon Echo Digital Voice Assistant Using a Denial-of-Service Attack, IEEE SE Con, 2018
97. Jones, J., Wimmer, H., Haddad, R., PPTP VPN: An Analysis of the Effects of a DDoS Attack, IEEE SE Con, 2018
98. Powell, L., Wimmer, H., A Sampling of IT Service-Learning Activities: Possible Impact on Students and Community Partners, EDSIG, November 2018
99. Sachdev, H., Wimmer, H., Chen, L., A Digital Forensic Tool for Mobile Devices: Paraben, Proceedings of the MakeLearn and TIIM International Conference, 16–18 May 2018, Naples, Italy
100. Olajide, O., Wimmer, H., Haddad, R., Vulnerability Analysis of Content Management Systems to SQL Injection Using SQLMAP, IEEE SE Con, 2018
101. Raji, M., Wimmer, H., Haddad, R., Analyzing Data from an Android Smartphone while Comparing between Two Forensic Tools, IEEE SE Con, 2018

102. Don, T., Wimmer, H., Rebman, C., Scheidt, S., Diving Into the Darknet: Using Tableau to Shed Some Light On Data Analysis, SWDSI 2018
103. Booker, Q., Rebman, C., Wimmer, H., Kitchens, F., Using Ann with Geodesic Acceleration to Maximize Smart Energy Management, SWDSI 2018
104. Khan, S., Wimmer, H., Powell, L., Open vs. Close Source Decision Tree Algorithms: Comparing Performance Measures of Accuracy, Sensitivity and Specificity, CONISAR 2017
105. Al Sadi, M., Wimmer, H., Chen, L., Wang, K., (July 2017), "Improving the Efficiency of Big Forensic Data Analysis Using NoSQL", 10th EAI International Conference on Mobile Multimedia Communications, Chongqing, People's Republic of China, 2017
106. Powell, L., Hendon, M., Wimmer, H., The Need for an Emotional Intelligence for Information Technology Course: Framework for Educators and Academic Institutions, EDSIGCON, 2017
107. Sorto, M., Wimmer, H., Aasheim, C., "Feeling The Stock Market: A Study In The Prediction Of Financial Markets Based On News Sentiment", Southern Association of Information Systems, St. Simons, GA, USA, 2017
108. Wimmer, H., Powell, L., (Nov. 2016), "Principle Component Analysis for Feature Reduction and Data Preprocessing in Data Science", CONISAR, Las Vegas, NV, USA, 2016
109. Nwankwo, C. Wimmer, H., Du, J., Predicting Movie Reviews Using Sentiment Analysis of Tweets, Midwest Decision Science Institute (MWDSI), Grand Rapids, MI, 2017
110. Kaleta, J., Wimmer, H., (March 2016), "An Exploration of Using Twitter Data to Predict the Results of the U.S. Primary Elections", SEINFORMS, Charleston, SC
111. Powell, L., Wimmer, H., Nwobodo, E., (Nov. 2016), "Teaching Real-Time Streaming Analytics with Microsoft Azure and Power BI", ISECON, Pittsburg, PA
112. Sachdev, H., Wimmer, H., Chen, L. (Oct. 2016), "Improving Real-Time Data Streaming Security to Promote Patient and Physician Socialization", IEEE SocialCom, Atlanta, GA
113. Wimmer, H., Yoon, VY, (Aug. 2015) "Leveraging Technology to Improve Intent to Purchase", The 17th International Conference on Electronic Commerce (ICEC 2015), Seoul, South Korea
114. Hall, K., Wimmer, H., (May. 2015) "Integrating ERP and CRM into the University Curriculum with Microsoft Dynamics AX and CRM", Academy of Marketing Science (AMS), Denver, CO.
115. Kilgus, L.C., Wimmer, H. & Powell, L.M. (2015). Evaluating the Effects of Content Reinforcement. The Northeastern Decision Science Institute Conference (NEDSI), Cambridge, MA.
116. Wimmer H, (2014). "A Multi-Agent System for Healthcare Data Privacy", AMCIS, Savannah, GA USA, 2014 (*Best Conference Paper Nominee, Best Paper in Track Award*)
117. H. Wimmer, (2014). "Computer Assisted Communication for the Hearing Impaired in an Emergency Room Scenario." Southern Association of Information Systems. Marriott City Center, Macon, GA 2014.
118. Wimmer, H. & Narock, T. (2014). "Integrating and improving quality, trust, and comprehension of financial data using Semantic Web Technologies: A proposed conceptual model." Northeast Decision Sciences Annual Conference, Philadelphia, Pennsylvania 2014.

119. Rada, R., Wimmer, H., & Mhashi, M. (2014). "Online Programming Tutorials and a Recommender System." Northeast Decision Sciences Institute, Philadelphia, Pennsylvania 2014
120. H. Wimmer and L. Zhou, (2013). "Word Sense Disambiguation for Ontology Learning," in AMCIS, ed. Chicago, IL USA, 2013.
121. H. Wimmer and R. Rada, (2013). "Heuristic Guided Evolution," Southern Association of Information Systems. Hilton DeSoto, Savannah, GA 2013.

Conference Poster & Abstract Presentations

122. Aasheim, C., Wimmer, H, Fintech: A Survey of Consumer Use To Benefit Non-Profits, SEDSI Feb 2022,
123. Rebman, C., Wimmer, H., Booker, Q., White, G., Faculty opinions on student preparation, performance, and evaluations 2019, SWDSI 2020
124. Rebman, C., Wimmer, H., Booker, Q., Kim, S., To be safe or not be safe? That is the 5g question that we ask of thee?, SWDSI 2020
125. Tung, C, Powell, L, Lee, K, Hall, k, Wimmer, H., Social Analytics Governance: A Literate Review of Practices, INFORMS 2018
126. Du, J., Wimmer, H., Rada, R., "Hour of Code": A Case Study, EDSIGCON 2017
127. Baggett, J., Covington, A., Wimmer, H., IT Autonomous Vehicles: Playing the Blame Game, Georgia Southern College of Engineering and IT Research Symposium, 2017
128. Al-Sadi, M., Wimmer, H., Chen, L., NoSQL for Big Forensic Data, Georgia Southern College of Engineering and IT Research Symposium, 2017
129. Paul, A., Wimmer, H., Improving Attribute Based Encryption, Georgia Southern College of Engineering and IT Research Symposium, 2017
130. Sachdev, H., Wimmer, H., Chen, L., RC4m: Improving RC4 Encryption, Georgia Southern College of Engineering and IT Research Symposium, 2017
131. Cuk, S., Wimmer, H. Problems Associated with Patient Care Reports from the EMT's Perspective, Georgia Southern College of Engineering and IT Research Symposium, 2017
132. Don, T., Wimmer, H., Using Tableau to Visualize Darknet Data, Georgia Southern College of Engineering and IT Research Symposium, 2017
133. Khan, S., Wimmer, H., Comparing Open and Closed Source Data Science Algorithms on SEER Data, Georgia Southern College of Engineering and IT Research Symposium, 2017
134. Nwankwo, C., Wimmer, H., Sentiment Analysis for Prediction of Movie Ratings, Georgia Southern College of Engineering and IT Research Symposium, 2017
135. Mourfield, P., Hyman, H., Wimmer, H., UG Harvey Hyman Hayden Wimmer IT Using Augmented Reality and iBeacons to Provide Mobile Devices Golf Course Information, Georgia Southern College of Engineering and IT Research Symposium, 2017
136. Powell, L., Wimmer, H., (Nov. 2016), "Parental Perceptions and Recommendations of Computing Majors: A Technology Acceptance Model Approach", EDSIG, Las Vegas, NV, USA.
137. Powell, L., Wimmer, H., Kilgus, L., Powell, D., (Aug. 2016), Internet of Things: Entrepreneurial Concepts, Business and Applied Science of North America (BAASANA) Conference, NYC, USA.
138. Wimmer, H , Powell L (2015), A Comparison of Open Source Tools for Data Science, CONISAR, Wilmington, NC USA 2015 (Meritorious Paper Award)

139. Powell L, Wimmer, H (2015), Evaluating the Effectiveness of Student Group Work for Mobile Application Development Learning, Productivity, Enjoyment and Confidence in Quality, EDSIG, Wilmington, NC USA 2015
140. Wimmer, H, Hall, K (2015), A Technical Infrastructure to Integrate Dynamics AX ERP and CRM into University Curriculum, EDSIG, Wilmington, NC USA 2015
141. Wimmer, H., Powell, L., Kilgus, L., Powell, D. (Aug. 2015). Mining the Bureau of Labor and Statistics for Job Skills, Business and Applied Science of North America (BAASANA) Conference, NYC, USA.
142. Powell, L., Wimmer, H., Kilgus, L., Powell, D. (Aug. 2015), Using Data Mining Techniques with a Course Management System: An Assessment of Data, Business and Applied Science of North America (BAASANA) Conference, NYC, USA.
143. Kilgus, L., Powell, D., Wimmer, H., Powell, L. (Aug. 2015), Creating Online Virtual Learning Environments, Business and Applied Science of North America (BAASANA) Conference, NYC, USA.
144. Powell, D., Powell, L., Kilgus, L., Wimmer, H. (Aug. 2015), Online Learning: Resistance to Change, Business and Applied Science of North America (BAASANA) Conference, NYC, USA.
145. Kilgus, L.C., Powell, L.M., & Wimmer, H. (2015). IT Stress and Its' Impact on Student's Career Choice. The Northeastern Decision Science Institute Conference (NEDSI), Cambridge, MA.
146. Powell L, Wimmer, H (2014), Evaluating the Effectiveness of Self-Created Student Screencasts as a Tool to Increase Student Learning Outcomes in a Hands-On Computer Programming Course, ISECON, Baltimore, MD USA 2014
147. Nguyen, L. Wimmer, H. Powell, L. Nguyen, Q. (2014) "Task and Relationship Orientations across Cultures: An Empirical Study of German and Omani Working Adults", Academy of Business Research International Conference, Atlantic City, NJ
148. Powell, L., Wimmer, H., Powell, D. (2014). Experiential Workforce Service Learning Within the Classroom: Lessons Learned. Abstract Proceedings of Northeastern Association of Business, Economics and Technology Conference (NABET), State College, PA.
149. Wimmer H, Hall K, Powell L. (2014). "Using Natural Language Processing and Content Analysis to Enhance Virtual Discussion Groups", BAASANA 2014, RAMAPO College, NJ, USA (Best Presentation/ Paper Award)
150. Hall K, Powell L, Wimmer H. (2014). "Adoption of Social Analytics in B2B Firms", BAASANA 2014, RAMAPO College, NJ, USA
151. Powell L, Wimmer H, Hall K. (2014). "Today's Telecommunications: Student Reactions to Using R and TwitterR", BAASANA 2014, RAMAPO College, NJ, USA (Best Paper/ Presentation Award)
152. Powell, Wimmer, Kehres, and Abdul, (2013). "Embracing the Technology Shift towards Mobile Technology in the Classroom: Using and Creating Mobile Apps in IT Related Business Courses", NABET 2013

Book Chapters and Reviews

153. Rada, Du, Wimmer, "Trends in Gerotechnology: A Literature Review", Handbook of Research on Emerging Perspectives on Healthcare Information Systems and Informatics, *Chapter 6*, 2018
154. Wimmer, Rada, "Applying Artificial Intelligence to Financial Investing", The Encyclopedia of Information Science and Technology, Fourth Edition, *Chapter 1*, 2018

155. Wimmer, Yoon, Rada, “Strategies and Methods for Ontology Alignment”, Recent Advances in Intelligent Technologies and Information Systems, *Chapter 1*, 2015
156. Rada, Wimmer, 2014 “Artificial Intelligence and Investing”, The Encyclopedia of Information Science and Technology, Third Edition, *Chapter 9*, 2014
157. Wimmer “Review of Idea to Invention”, Journal of Applied Management and Entrepreneurship (JAME), vol. 19, no 2014

Master’s Thesis and Projects Supervised

Committee Chair

- Ijogun, Oluwaseyi, Application of Big Data Technology, Text Classification, and Azure Machine Learning for Financial Risk Management Using Data Science Methodology, Dec 2023
- Odeniran, Qozeem, Comparative Analysis of Full-stack Development Technologies: Frontend, Backend and Database, Dec 2023
- Akanmu, Ikeoluwa, A Comparative Study of Abstractive Text Summarization: OpenAI vs. Human Quality Dec 2023
- Okoronkwo, Chioma, A Comparison of DistilBERT and LLaMA for Twitter Spam Detection, Dec 2023
- Kangathe, Lorna, Network Intrusion Detection System with Machine Learning as a Service, May 2023
- Omakwu, Stephanie, Using Textual Analytics to Process Information Overload of Cyber Security Subreddits, May 2023
- Nwachukwu, Chukwudi, Cloud-Based Machine Learning on the Big 3 Providers, May 2023
- Odigbo, Chidoze, An Evaluation of SIEM Effectiveness in Detecting Advanced Persistent Threat, May 2023
- Achanga, Peter, User Perception of Front-End Design Framework. May 2023
- Goolsby, Kenterious, Facial Expressions Analysis: Detecting Emails, May 2023
- Trawinski, Alex, The Application of Deep Learning and Cloud Technologies to Data Science, Dec 2022
- Adekanbi, Omotola, Big Cybersecurity Data with Hadoop and Mahout, Dec 2021
- Tigner, M, 802.11 Wi-Fi Security, May 2021
- Patel, N., Defense of Bluetooth Technology, May 2021
- Rahman, Shiam, Artificial Intelligence in Medical Data, May 2020
- Aliyu, Faith, Security Perceptions of Electronic Health Records, May 2019
- Egbedion, Beloved, Exploring Blockchain Performance With Cpuheavy Microbenchmark, May 2019
- Raji, Majeed, Digital Forensic Data Analysis, , May 2019
- Herman, Kyle, Perceptions and the Future of Libraries, A Multi-Dimensional Perspective, December 2018 (anticipated)
- Carrie, Billy, Cyber-Security Instructional Technology, December 2018 (anticipated)
- Townsend, Michael, Barriers to Adoption of Cloud Infrastructure Services: A Security Perspective, May 2018
- Nwankwo, Christian, A Data Science Based Research on Sentiment Analysis, Machine Learning, and Text Classification of Social Media and Digital Forensic Data. May 2018

- Don, Ton, Examining and exposing the Darknet, December 2017
- Cuk, Smiljana, Problems associated with patient care reports and transferring data between ambulance and hospitals from the perspective of emergency medical technicians, December 2017
- Sachdev, Hitesh, Securing, Extracting and Analyzing Mobile Forensic Data, May 2017

Grants and Funding (Representative)

Funded

- Ji, Wimmer, Chen, Cain (2023-2029), Enabling Lifelong Success in the Information Technology Workforce, NSF, \$2,490,223.00
- Wimmer (PI), Chen, Stueve, Greer (2018), Junior Investigators 2.0, NSA/NSF, \$98,492
- Wimmer (PI), Microsoft Azure Research Grant (2018), \$10,000
- Greer, Wimmer (Co-PI), Chen, (2017), Junior Investigators: Teaching Cyber-Security First Principles via Digital Forensics, National Security Agency (NSA), \$94,746
- Microsoft Azure Research Grant, Spring 2017, \$5000
- Digital Forensics Lab Startup Grant, Spring 2016, Georgia Southern University, \$8400
- Microsoft Azure Educator Grant, Spring 2016-Spring 2016, \$9000
- Georgia Southern Startup Grant, Fall 2015-Spring 2017, \$25,000
- REACT for TECH – “Research Environment and Creative Teaching for Technology”, Sept 2014 – May 2015, Bloomsburg University, Awarded \$15,000
- Undergraduate Research, Scholarly and Creative Activity (URSCA), Summer 2014, Supervised 2 students for approximately \$4500
- Innovative Teaching Development Award, Spring 2015, BU COB, \$2500
- KIZ Grant for Community Project Development, Spring 2015, \$8000-\$10000

Academic Positions Held

Aug. 2019-	Associate Professor (with Tenure) of Information Technology	Georgia Southern University
Jan 2024-	IHLA Faculty Fellow	Institute for Health Logistics and Analytics
2015-2019	Assistant Professor of Information Technology	Georgia Southern University
2013-2015	Assistant Professor of Information and Technology Management	Bloomsburg University
2012-2013	GAANN Fellow	University of Maryland Baltimore County
2012-2013	Adjunct Professor of Business and Computer Science	Elizabethtown College
2011-2013	Adjunct Professor of Computer Information Systems	Harrisburg Area Community College
2009-2011	Teaching Assistant	University of Maryland Baltimore County

Courses Taught

Georgia Southern University

- IT Research Methods

- I.T. Infrastructure
- I.T. Capstone Project
- Data Science Methods (Upper-level Graduate)
- Thesis Advisor
- I.T. Capstone (online)
- Discrete Math for IT

Bloomsburg University

- Project Management
- Business Information Systems Applications (Graduate)
- Information and Technology Management Applications
- Healthcare Informatics

University of Maryland Baltimore County (UMBC)

- Introduction to Computer Programming
- Healthcare Informatics (Teaching Assistant)
- Scripting and Markup Languages (Teaching Assistant)

Elizabethtown College

- Database Management Systems
- Accounting Information Systems

Harrisburg Area Community College (HACC)

- Introduction to Software for Business
- Introduction to Computer Systems
- Microsoft Windows Operating Systems
- Introduction to Power Point

Course Development

- Data Science Methods (graduate) – IT 7631
- Discrete Math for IT – ITW 2431
- Project Management – ITM 322
- Healthcare Informatics - ITM 468
- Intra-organizational Enterprise Resource Planning – 400 Level Course
- Supply Chain Management Curriculum Design Team
- MBA – Concentration in Information and Technology Management (ITM)

Service

Academic

<https://publons.com/researcher/1544307/hayden-wimmer/>

- Editor in Chief – International Journal of E-Adoption (IJEa), 2014-
- Editorial Review Board, Journal of Computer Information Systems (JCIS), 2018-
- Associate Editor - International Journal of Online Pedagogy and Course Design (IJOPCD), 2017-
- IEEE IEMCON Technical Program Committee and Session Chair 2021
- Reviewer Machine Learning with Applications

- Reviewer – HICSS 2020, 2021, 2022, 2023
- Reviewer EDSIG/CONISAR 2020
- Reviewer IACIS/ Issues in Information Systems 2020
- Reviewer NWO Dutch Government Grant - 2020
- Associate Program Chair, SEDSI Conference, 2019
- Program Committee WITS 2018-2019, Workshop on Information Technology and Systems 2018.
- Program Committee IEEE Smart City Innovations, 2018
- Reviewer, HICSS 2018
- Reviewer, Expert Systems with Applications, 2018
- Reviewer EDSIG Conference 2018-
- Reviewer CONISAR Conference 2018-
- Editorial Advisory Board, "FinTech as a Disruptive Technology for Financial Institutions", Book 2018
- Program Committee WITS 2017, Workshop on Information Technology and Systems 2017.
- Reviewer – Special Issue of Journal of Management Information Systems (JMIS), 2017
- Session Chair – EDSIGCON 2017
- Reviewer – EDSIG and CONISAR 2017
- National Science Foundation, Panel Reviewer (On-Site), Directorate for Education, 2016
- National Science Foundation, Panel Reviewer (Virtual), Directorate for Education, 2016
- Associate Director of ITM and Executive Secretary of the Board, BAASANA 2013-2017
- Program Committee, WEB 2015, ICIS Workshop on E-Business, 2015
- Program Committee SPAN 2016: Workshop on Sensor, P2P and Social Networks, 2015
- Reviewer – EDSIG and CONISAR 2016
- Reviewer – Expert Systems with Applications 2016
- Reviewer – EDSIG and CONISAR 2015
- Reviewer – Expert Systems with Applications 2015
- Reviewer – ISECON and CONISAR 2014
- Track Chair – BAASANA 2014 Conference 2014
- Track Chair – Southern Association of Information Systems Conference 2014
- Session Chair Big Data – Northeast Decision Sciences Institute 2014
- Microsoft Dynamics AX Curriculum Training – March 2014
- Reviewer – AMCIS 2014 Intelligent Systems Track 2014
- Reviewer – SAIS 2014
- Reviewer – ISECON 2014
- Reviewer – CONISAR 2014
- Reviewer – Journal of Decision Systems, 2014
- Reviewer – AMCIS 2013 Intelligent Systems Track 2013
- Reviewer – SAIS 2013
- Reviewer – British Journal of Mathematics and Computer Science 2013
- Faculty Senate/ Operations House – HACC - 2012
- Graduate Representative for Tenure Review – UMBC – 2011
- Elizabethtown College Faculty Development Seminars 2011

Georgia Southern University

- Director – [DAC] Lab (<http://www.daclab.net>)
- Senate Executive Committee 2022-2025
- University Faculty Senate, 2017-2020, 2022-2025
- University Faculty Service Committee (chair), 2017-2019
- University Planning, Budget, and Facilities (chair), 2018-2020
- University Faculty Grievance Committee (chair)
- College of Engineering and Computing Tenure and Promotion (chair) 2019-2021
- College of Engineering and Computing Faculty Welfare Committee 2021-
- College of Engineering and Computing Research Excellence 2018-2022
- Reaccreditation Lead for The Southern Association of Colleges and Schools (SACS) 2017-2020
- PhD Exploration Committee 2020-2021
- Department Assessment (chair) 2015-
- Department Curriculum (chair) 2015-
- Department Travel 2019-
- Search and Screen for 1 IT Tenure Track Faculty 2021-2022
- Search and Screen for 2 IT Tenure Track Faculty 2019-2020
- Search and Screen for Dept. of I.T. Chair, 2018-2019
- Search and Screen for Instructor, 2018-2019
- College of Engineering and Computing Curriculum 2021
- College of Engineering and Computing (CEC) Faculty Award of Excellence in Scholarly Activity Recipient 2018-
- CEC Faculty Research Committee 2016-
- Search and Screen for Temporary Instructor in Information Technology 2017
- Search and Screen for Assistant Professor in Information Technology 2015

Bloomsburg University

- Director – Development and Technology Assistance Lab [Data]Lab 2013-2015
- MBA Advisory 2013-2015
- Faculty Professional Development Committee 2013-2015
- Sutliff Building Renovation Committee 2014
- Assessment- Alternate 2014
- ACT 101 Mentor 2013-2015
- ITM Club Faculty Mentor 2013-2015
- URSCA Mentor 2014-2015
- ITM Curriculum 2013-2015
- Supply Chain Management Design Team 2014-2015