

Abbreviated CURRICULUM VITA

Sharon Andrews, Ph.D.

Professor and Program Director of Software Engineering
Founding Chairperson, Software Engineering Online
Department of Engineering
College of Science and Engineering
University of Houston-Clear Lake
2700 Bay Area Boulevard, Houston, TX 77058-1098
whites@uhcl.edu (email) | 281.283.3867 (office phone)

RESEARCH INTERESTS

Problem Conceptualization, Software Architecture, Software Engineering, Domain Modeling, Human Trafficking Prevention and Detection, Esports, Instructional Engagement

ACADEMIC PREPARATION

Ph.D. Computer Science, Center for Advanced Computer Studies, University of Louisiana, Lafayette, LA.
M.S. Computer Science, Center for Advanced Computer Studies, University of Louisiana, Lafayette, LA.
B.F.A. Advertising Design, University of Louisiana, Monroe, Louisiana.

ACADEMIC, PROFESSIONAL POSITIONS

2021-2022 Editor-in-Chief International Journal of eSports Multidisciplinary Research (IJEMR), International Journal of eSports Research (IJER)
2020-2022 Editor-in-Chief & Founder International Journal of eSports Multidisciplinary Research (IJER)
2020 Professor of Software Engineering
2017-Present Program Director, Software Engineering Master's Program, University of Houston-Clear Lake, Houston, Texas.
1997-2015 Program Director, Software Engineering Master's Program, University of Houston-Clear Lake, Houston, Texas.
2001 Associate Professor of Software Engineering, University of Houston-Clear Lake, Houston, Texas.
1995 Assistant Professor of Software Engineering, University of Houston-Clear Lake, Houston, Texas.
2006-2008 Founding Board Member Institute of Software Engineers (ISE)
2006-2008 Vice President of Education of ISE (Institute of Software Engineers)
1999-2000 Reviewer, and panel member, National Science Foundation's CISE (Computer Integrated Software Engineering) portion of the ENG/CISE Combined Research-Curriculum Development (CRCD) program.
1995-2001 Assistant Professor of Software Engineering. Software Engineering Program, University of Houston-Clear Lake, Houston, TX.
1994-1995 Visiting Assistant Professor: Computer Science Department, Tulane University, New Orleans, LA.

PUBLICATIONS

1. **Andrews, S.** & Crawford, C. M. (Eds). (semi-annual, 2021) *International Journal of eSports Research (IJER)*. ISSN: 2691-9273 | EISSN: 2691-9281 | DOI: 10.4018/IJER. <https://www.igi-global.com/journal/international-journal-esports-research/250425>
2. **Andrews, S.** & Crawford, C. M. (Eds). (2022) *International Journal of eSports Multidisciplinary Research (IJEMR)*. ISSN: 2771-1986 | EISSN: 2771-2001 | DOI: 10.4018/IJEMR. <https://www.igi-global.com/journal/international-journal-esports-multidisciplinary-research/297133>

Scholarly Book Publications

3. **Andrews, S.** & Crawford, C. (Eds). (2022). *Paths to the Prevention and Detection of Human Trafficking*. Hershey, PA: IGI Global. DOI: 10.4018/978-1-6684-3926-5. <https://www.igi-global.com/book/paths-prevention-detection-human-trafficking/286778>
4. **Andrews, S.** & Crawford, C. (Eds). (2021). *Handbook of Research on Pathways and Opportunities into the Business of eSports*. Hershey, PA: IGI Global. 473 pages. DOI: 10.4018/978-1-7998-7300. <https://www.igi-global.com/book/pathways-opportunities-into-business-esports/262494>

Refereed Journal Publications

5. Amith, M., **Andrews White, S.**, Atchyutha, C., Ramya, P., Ballem, S. V., & Tao, C. (under review). NET-EXPO Core: Computing high volume exposure models for bipartite graph networks. *Software Impacts*.
6. Crawford, C. & **Andrews, S.**, & Wallace, J. K. (2022). Implicit Cognitive Vulnerability through Nudges, Boosts and Bounces. *International Journal of Hyperconnectivity and the Internet of Things (IJHIOT)*. Vol 6, Issue 1, 1-14. <http://doi.org/10.4018/IJHIoT.285588> Invited Paper.
7. **Andrews, S.** (2021). Innovation Process for Problem Conceptualization. *International Journal of Software Innovation (IJSI)*. Vol 9 Issue 3, pp. 91-103.
8. Crawford, C. M., **Andrews, S.**, & Young Wallace, J. K. (2021). Co-creative collegial communities of instructional engagement. *International Journal of Hyperconnectivity and the Internet of Things (IJHIOT)* 5(2), pp. 38-56. <https://doi.org/10.4018/IJHIoT.2021070103> (IJHIOT). (Invited Paper)
9. **Andrews, S.** & Sheppard, M. (2020). Architecture Erosion: impacts, causes, and management of issues. *International Journal of Computer Science and Security (IJCSS)* Volume 14, Issue 2, 82-93.
10. **Andrews, S.**, Bradbury, R., & Crawford, C. (2020). Fiero and Flow in Online Competitive Gaming: The gaming engagement framework. *International Journal of Gaming and Computer Mediated Simulations (IJGCMS)*, 12(1). doi:10.4018/IJGCMS.2020010102
11. Crawford, C., **White, S. A.**, & Wallace, J. Y. (2019). Editorial: Rethinking Pedagogy, Andragogy, and Heutagogy. *Academic Exchange Quarterly (AEQ)* ISSN 1096-1453, Volume 23(1), Chapter 5, 4-10. (Invited Editorial for the journal, also underwent double blind peer review)

12. Crawford, C., Wallace, J. Y., & **White, S. A.** (2018, Winter). Rethinking Pedagogy, Andragogy, and Heutagogy. *Academic Exchange Quarterly, ISSN 1096-1453, 22(4)*, 15-20.
13. Adda, M., Wu, L., & **White, S.** (2012). Pattern Detection With Rare Item-Set Mining International Journal on Soft Computing. *Artificial Intelligence and Applications (IJSCAI), 1(1)*.
14. **White, S.** & Amith, M. (2012). Software Design, a 2011 Primer. *ACET Journal of Computer Education and Research, Volume 7, Number 1, ISSN 1547-3716*.
15. Wu, L., **White, S.**, & Feng, Y. (2012). Analysis of development cooperation with shared authoring environment in academic setting. *International Journal on Integrating Technology in Education, 1(1)*, 1-9.
16. Wu, L., **White, S.**, Feng, Y., Helm, J., & Wiggins, N. (2012, October). Computational Analysis of Code Collaboration Pattern and Semantic Role. *International Journal of Computer Science & Information Technology, 4(5)*.
17. Wu, L., **White, S.**, Helm, J., & Feng, Y. (2012, September). Distributed software development modeling and control framework. *International Journal of Software Engineering & Applications, 3(5)*.

Refereed Edited Book Chapter Publications

18. **Andrews, S.**, Bradbury, R. E., & Crawford, C. M. (2020/2023). Fiero and Flow in Online Competitive Gaming: The Gaming Engagement Framework. In I. Management Association (Ed.), [Research Anthology on Game Design, Development, Usage, and Social Impact](#), Chapter 16, (pp. 307-322). IGI Global. <https://doi.org/10.4018/978-1-6684-7589-8.ch016>, Reprinted from Andrews, S., Bradbury, R. E., & Crawford, C. M. (2020). *Fiero and flow in online competitive gaming: The gaming engagement framework*. International Journal of Gaming and Computer-Mediated Simulations (IJGCMS), 12(1), 28-42.
19. Crawford, C. M., Bromer, B., Moffet, N., **Andrews, S. K.**, Dickenson, V., Newsum, J., Wallace, J., & Dillard, J. (2023). Intergenerational Relations that Guide Educational Planning: Perspectives on the University Course Experience., In S. Polat, & C. Celik (Eds.), *Perspectives on Empowering Intergenerational Relations in Educational Organizations*. (pp. tbd). IGI Global (2023).
20. Newsum, J., Wallace, J., Dillard J., Bromer, B., **Andrews, S. K.**, Dickenson, V., Moffet, N., & Crawford, C. M.. (2023). Learning and Leading within a Multigenerational University Course Experience: Differences, Similarities, Conflicts, & Strengths, In S. Polat, & C. Celik (Eds.), *Perspectives on Empowering Intergenerational Relations in Educational Organizations*. (pp. tbd). IGI Global (2023).
21. **Andrews, S. K.**, & Crawford, C. M. (2022). Synthesizing Anti-Human Trafficking Efforts: The Paths Already Taken, Amplifiers of Risk, and the Paths Forward. In S. Andrews, & C. Crawford (Ed.), *Paths to the Prevention and Detection of Human Trafficking* (pp. 1-23). IGI Global.
22. **Andrews, S. K.**, & Crawford, C. M. (2022). A Model for Motivation-Driven Assignment Design. In B. Bromer, & C. Crawford (Ed.), *Handbook of Research on Learner-Centered Approaches to Teaching in an Age of Transformational Change* (pp. 248-269). IGI Global.

23. Crawford, C. M., & **Andrews, S. K.** (2022). Rethinking the Curriculum to Reflect a Digital Age Model of Competencies, Dispositions, and Capabilities: Transforming Understandings of Teaching and Learning. In B. Bromer, & C. Crawford (Ed.), *Handbook of Research on Learner-Centered Approaches to Teaching in an Age of Transformational Change* (pp. 1-20). IGI Global.
24. **Andrews, S.** (2021). The Evolution of Elearning within a Software Engineering Graduate Program. In Crawford, C. and Simons, M.A. (Eds). *eLearning Engagement in a Transformative Social Learning Environment* (pp. 244-262). Hershey, PA: IGI-Global. doi: 10.4018/978-1-7998-6956-6.
25. Crawford, C., **Andrews, S.**, Lacher, L, & Dunnivant, T. (2021). Considering Instructor's Philosophical Belief Systems and Potential Impact upon eLearning Engagement: Transformative Social Learning Environments. In Crawford, C. and Simons, M.A. (Eds). *eLearning Engagement in a Transformative Social Learning Environment* (pp. 92-113). Hershey, PA: IGI-Global. doi: 10.4018/978-1-7998-6956-6.
26. **Andrews, S.**, Lacher, L, & Dunnivant, T. (2021). Additional eLearning Considerations Around the Instructor's Philosophical Belief Systems: Potential Transformative Impacts. In Crawford, C. and Simons, M.A. (Eds). *eLearning Engagement in a Transformative Social Learning Environment* (pp. 114-134). Hershey, PA: IGI-Global. doi: 10.4018/978-1-7998-6956-6
27. **Andrews, S.** (2021). A Knowledge-Based Risk-Driven Model Supporting Collaborative Online Course Creation. In Crawford, C. (Eds). *Shifting to Online Learning Through Faculty Collaborative Support* (pp. 142-162). Hershey, PA: IGI-Global. doi: 10.4018/978-1-7998-6944-3
28. **Andrews, S.**, Crawford C. (2021). Barriers, Issues and Similarities among Women in eSports and Similar Mixed Gender Sports: Ascertaining Common Ground. In Andrews, S., & Crawford, C., (Eds). *Handbook of Research on Pathways and Opportunities into the Business of eSports* (pp. 25-46). . Hershey, PA.: IGI-Global. doi: 10.4018/978-1-7998-7300-6
29. **Andrews, S. K.**, Michael, T. B, William, M. A, Lacher, L.L, Crawford C.M. (2021). Impact of eSports Upon Higher Education From a Faculty Perspective: Transformational Pathways and Opportunities. In Andrews, S., & Crawford, C., (Eds). *Handbook of Research on Pathways and Opportunities into the Business of eSports* (pp. 149-178). . Hershey, PA.: IGI-Global. doi: 10.4018/978-1-7998-7300-6
30. **Andrews, S.**, Newsum, J., Crawford, C. M., & Moffett, N. L. (2021). Sisyphus Leans into the Professoriate: Faculty Discuss Career Considerations and the Academic Landscape. In Moffett, N. L. (Ed.) *Navigating Post-Doctoral Career Placement, Research, and Professionalism* (pp. 185-226). Hershey, PA: IGI-Global. DOI: 10.4018/978-1-7998-5065-6.ch009.
31. Crawford C. M, & **Andrews White, S.** (2021). Adventures on the Golden Road: A Promenade through the Roadwork. In Moffett, N. L. (Ed.). *Navigating Post-Doctoral Career Placement, Research, and Professionalism* (pp. 28-52). Hershey, PA.: IGI-Global. DOI: 10.4018/978-1-7998-5065-6.ch002.
32. Crawford, C., Newsum, J. M., **Andrews White, S.**, & Wallace, J. (2020). Creativity and Impactful Learning through Implicit Cognitive Vulnerability. In M. Khosrow-Pour (Ed.). *Handbook of Research on Modern Educational Technologies, Applications, and Management.* (p. 744-761). Hershey, PA: IGI-Global. doi:10.4018/978-1-7998-3476-2.ch046 (Invited, and underwent rigorous peer review)

33. Crawford, C., Newsum, J. M., **Andrews White, S.**, & Wallace J. (2020). Supporting Community Engagement through Real World Instructional Learning. In M. Khosrow-Pour (Ed.). *Handbook of Research on Modern Educational Technologies, Applications, and Management*. (p. 415-431). Hershey, PA: IGI-Global. doi:10.4018/978-1-7998-3476-2.ch025 (Invited, and underwent rigorous peer review)

Refereed Conference Proceeding Publications

34. Whiting, E., & **Andrews, S.** (2020). Drift and Erosion in Software Architecture: Summary and Prevention Strategies. *Proceedings of 4th International Conference on Information System and Data Mining (ICISDM)*. pp. 132-138. Hilo, Hawaii, May 15-27.
<https://doi.org/10.1145/3404663.3404665>
35. **White, S. A.** (2000). Experience with a process for Software Engineering web-course development. *Proceedings of Frontiers in Education Conference*, IEEE Computer Society, October 18-21, 2000, Kansas City, Missouri.
36. Drew, D., & **White, S.A.** (1999). From Creational Craftsmanship to Engineered Construction. *Proceedings of ASME and API Energy Information Management (ASME-99)* Feb. 1999, Houston, TX.
37. **White, S. A.** & Lemus, C. (1998). Architectural Reuse in Software Development, *Proceedings of 20th International Computers in Engineering Symposium (ASME-ETCE98)* Jan. 1998, pp. 1-8.
38. **White, S. A.** & Lemus, C. (1997a). The Software Architecture Process. *Proceedings of ASME and API Energy Information Management - Incorporating ETCE*, (ASME-ETCE97) pp. 170-175 Houston TX, Jan. 29 - Feb 2, 1997.
39. **White, S. A.** & Lemus, C. (1997b). Architecture Reuse through a Domain Specific Language Generator. *Proceedings of WISR8: The eight annual international workshop on Software Reuse*, pp.: White-S-A-1: White-S-A-6, March 23-26, 1997, Ohio State University.
40. **White, S. A.** (1996a). Architectural Design Language Generation Project, *Proceedings of the 1996 workshop, A NASA Focus on Software Reuse*. pp. 631-633, September 24-27, George Mason University, Fairfax, Virginia.
41. **White, S. A.** (1996b). Software Architecture Design Domain. *Proceedings of the Second World Conference on Integrated Design and Process Technology*, Vol. 1. pp. 283-290, Austin, TX. Dec. 1-4, 1996.
42. **White, S. A.** (1996c). A Design Metalanguage for Design Language Creation. *Proceedings of ASME and API Energy Information Management - Incorporating ETCE*, (ASME-ETCE96) Houston TX, Jan. 29 - Feb 2, 1996, Volume I Computers in Engineering, pp. 135-144.
43. **White, S. A.** (1996d). The Repository Based Software Engineering Program. *Proceedings of the 1996 workshop, "A NASA Focus on Software Reuse*. pp. 53-62, September 24-27, 1996, George Mason University, Fairfax, Virginia.
44. **White, S. A.** (1995a). A Framework for the development of Domain Specific Design Support Systems. *Proceedings of the First World Conference on Integrated Design & Process Technology*, Austin, TX. IDPT Vol 1, pp. 37-42, Dec. 6-9, 1995.

45. **White, S. A.** (1995b). Development of a Language-based Framework for the Automatic Generation of Domain-specific Design Languages. *Proceedings of the ASME Symposium on Computers in Engineering, (ASME-ETCE95)* Houston TX, Jan. 29 - Feb 1, 1995, PD vol. 67, pp. 23-32.
46. **White, S. A., & Albright, L.E.** (1994). Integration of the Design and Realization Phases of Apparel Manufacturing, *Proceedings of the Fifth Annual Academic Apparel Research Conference (AARC)*, Lafayette LA., Feb. 17-18, 1994, pp. 5-1:5-13.

Published Technical Papers and Reports

47. **White, S. A. & Lemus C.** (1995-1996). Domain Specific Architectural Design Language, *Institute for Space Systems Operation Annual Research Report*, pp. 38 -40.
48. **White, S. A. & Lemus C.** (1996-1997) Domain Specific Architectural Design Language Generation, *Institute for Space Systems Operation Annual Research Report*, pp. 55-58.
49. **White, S. A. & Lemus C.** (1997-1998) Domain Specific Architectural Design Language Generation, *Institute for Space Systems Operation Annual Research Report*, pp. 62-69.
50. **White, S. A. & Mckay C.** (1999). *Advanced Air Traffic Transportation Technologies Final Report*, *Boeing Corp*, UHCL Tech report, May 1999.
51. Urban J. E., Wilson A. M., **White S. A.**, Kwong C. W., Puah V. T., Thanawastien S., Belkhouche B, Lanclos D. K., (November, 1989) Front-End Software Life Cycle Technique and Tool Research in Support of the Lockheed Ada Development Environment (Advent), Lockheed Software Technology Center, Austin, TX, *Center for Advanced Computer Studies*, University of Southwestern Louisiana (now University of Louisiana.)

Internal Reports / White Papers

52. **White, S. A.**, (2018). *Software Engineering Master of Science Degree* [White Paper], Software Engineering, University of Houston-Clear Lake.
53. **White, S. A.**, (2018). *Software Engineering Recruiting* [White Paper], SCE University of Houston-Clear Lake.
54. **White, S. A.**, (2018). *Software Engineering, A Discipline on the Rise and in Demand* [White Paper]. Software Engineering, University of Houston- Clear Lake.
55. **White, S. A.**, (2015). *Software Engineering MS Program 2009-2014, Five Program Review* [UHCL program review], Software Engineering, University of Houston Clear Lake.
56. **White, S. A.**, (2008). *Software Engineering MS Program, Five Year Review* [UHCL program review], Software Engineering, University of Houston Clear Lake.
57. **White, S. A.**, (2015/updated 2020). *SDP: Plan Based Software Development Process*, [Research Report]: Software Engineering, University of Houston-Clear Lake, 2015/2020.
58. **White, S. A.**, (2002). *Software Engineering MS Program, Five Year Review* [UHCL program review], Software Engineering, University of Houston Clear Lake.

Dissertation

59. **White, Sharon Andrews.** A framework for the integration of the design and realization phases of product development. PhD Dissertation. University of Southwestern Louisiana, now University of Louisiana, USA. 1994. ACM Digital library, Order Number: AAI9431716.

CONFERENCE PRESENTATIONS

1. Andrews, S., Anyanwu, K., Simons, M., & Crawford, C. (2022, October 12-14). Quality assurance attempts amidst crisis in program development and implementation strategies: experiences of four professionals while rethinking strategic curriculum design and reform [Multiple Presentation Session]. The 52nd International Society for Educational Planning Annual Conference 2022.
2. Anyanwu, K., Simons, M., Andrews, S., & Crawford, C. (2022, October 12-14). Leaning into the future of training and talent development: educational planning considerations as we consider emerging smart technologies such as artificial intelligence, machine learning, augmented reality, virtual reality [Multiple Presentation Session]. The 52nd International Society for Educational Planning Annual Conference 2022.
3. Crawford, C. & Andrews, S.. (2021). *Overhyped versus Burgeoning Brilliance: What is the Potential of eSports within Educational Planning?*, [2021 Conference Presentation], International Conference for Educational Planners (ISEP), First Virtual Research Conference, October 12-15, 2021, presentation Oct. 15th 2021.
4. Crawford, C., Andrews, S., (2021). *The Potential of eSports in Learning: Is eSports Overhyped?*. [2021 Conference Presentation]. (FEA/ABE) Conference, Virtual, Sept 23-25th, 2021. Presentation Thursday Sept 23rd, 3:30pm
5. Crawford, C., Andrews, S., Newsum, J., Wallace, J. Y, & Moffett, N., [2021 Conference Presentation]. *A Discussion with Five Academics: Changing Views of Teaching and Learning*,. ATE 2021 Association of Teacher Educators Annual Meeting. Feb 16, 2021. 3pm to 4pm.
6. Crawford, C., Andrews, S., Newsum, J., Wallace, J. Y, (2021) “The Burgeoning Growth of eSports and Potentials in Educational Realms “. [2021 Conference Presentation]. ATE 2021 Association of Teacher Educators Annual Meeting. Feb 17, 2021. 1pm to 2pm.
7. Andrews, S. “Pathways to Success in Software Engineering, 2020”, [Zoom Presentation] UHCL Graduate Student Advising, October 15, 2020.
8. Crawford, C., Andrews, S., Newsum, J., Wallace, J. Y. & Moffett, N. Five academics and changing understandings of curriculum and curricular engagement: Pedagogy, andragogy and heutagogy. [Conference Presentation]. International Conference for Educational Planners (ISEP), First Virtual Research Conference, October 14-16, 2020. (presentation given October 16th)
9. Crawford, C. & Andrews, S. Designing and adapting to a changing landscape: Developing a Business of eSports Curriculum. [Conference Presentation]. International Conference for Educational Planners (ISEP), First Virtual Research Conference, October 14-16, 2020. (presentation given Oct. 15th)
10. Andrews, S & Crawford C. Business of eSports [Conference Presentation]. Financial Education Association (FEA/ABE) Conference, Louisville, KY, Sept 17-19, 2020. Presentation Friday Sept 18th, 3:30pm.

11. Andrews, S. Pathways to Stem UHCL Hawk Talk. [Invited Presentation] UHCL Open House 2019
12. White, S. A. Women in Software Engineering. [Invited Presentation] ISE conference, Dallas, TX, 2007
13. Whites, S. Distance Education in Software Engineering, [Invited Presentation] ISE Conference, Dallas, TX, 2007
14. Whites, S. Certificates in Software Engineering. [Invited Presentation] ISE Conference, Dallas, TX. 2007
15. White, S. A. Software Engineering at UHCL, [Invited Presentation] Munez Engineering, Fall 2006.
16. White, S .A. Software Engineering at UHCL, [Invited Presentation] Women in Small Business Society. Summer 2006.
17. White, S.A. MS in Software Engineering, [Invited Presentation] Industry Group 2800 Bay Area. Fall 2003
18. White, S. A. MS in Software Engineering, [Invited Presentation] Presented at Compact Building – organized by UH’s Sandy Friedman to market online programs – Fall 2002
19. White, S. A. MS in Software Engineering, [Invited Presentation] Houston Society of Women Engineers. Fall 2002
20. MS in Software Engineering [Invited Presentation] NASA/JSC, Houston, TX. Fall 1999
21. MS in Software Engineering, [Invited Presentation] Reliant Energy, Houston, TX. Fall 1999
22. MS in Software Engineering [Invited Presentation] Texas Instruments, Fort Bend County TX. Fall 1999
23. Women in STEM, [Invited Presentation] Houston Society for Women Engineers meeting, 1998.
24. MS in Software Engineering [Invited Presentation] IBM, Austin Texas 1995.
25. MS in Software Engineering [Invited Presentation] IBM, Austin Texas 1996.
26. MS in Software Engineering [Invited Presentation] IBM, Austin Texas 1997.
27. MS in Software Engineering [Invited Presentation] IBM, in Austin Texas 1998.
28. White S. A. Architecture reuse in Software Development. [Conference Presentation]. 20th International Computers in Engineering Symposium, Jan. 1998.
29. White S. A. RBSE and ROSE, [Conference Presentation]. A NASA Focus on Software Reuse, George Mason University, Fairfax, Virginia, Sep, 24-27, 1996.
30. White, S. A. Architecture Reuse through a Domain Specific Language Generator, [Conference Presentation]. The eighth annual international workshop on Software Reuse, Ohio State University, March 1997.
31. White S. A. Software Architecture Design Domain, [Conference Presentation Second World Conference on Integrated Design and Process Technology Conference, Austin Texas, Dec. 1-4, 1996.

32. White, S. A. Development of a Language Based Framework for the Automatic Generation of Domain Specific Design Languages, [Conference Presentation]. American Society of Mechanical Engineers Symposium on Computers in Engineering in Houston, TX. Jan 29-Feb 1, 1995.
33. White, S. A. A framework for the Development of Domain Specific Design Support Systems [Conference Presentation]. First World Conference on Integrated Design and Process Technology in Austin, Texas, Dec. 7-9, 1995.
34. White, S. A. A Design Metalanguage for Design Language Creation, [Conference Presentation]. American Society of Mechanical Engineers Symposium on Computers in Engineering in Houston, Texas. Jan. 29-Feb 2, 1996

Service to the Profession

1. Regular Reviewer for Journal of Current Psychology
2. Reviewer, November 2022, for 2023 American Control Conference (ACC), San Diego, CA, USA, May 31 - June 2, 2023.
3. Member Technical Committee 2020-2023 International Conference on Information System and Data Mining (IC ISDM),
4. Co-Founder of *International Journal of eSports Research (IJER)*. Dr. Andrews and Dr. Caroline Crawford proposed the creation of the first double-blind peer reviewed international research journal in eSports in 2019 to publisher IGI-Global. Proposed was accepted and journal was created in 2020.
5. Editorial Advisory Board “Learner-Centered Approaches to Teaching in an Age of Transformational Change” IGI Global, 2022. <https://www.igi-global.com/book/learner-centered-approaches-teaching-age/288797>
6. Reviewer, Program Committee Member, 3rd International Conference on Machine Learning & Applications (CMLA 2021), September 25 ~ 26, 2021, Toronto, Canada
7. Reviewer *The 2nd International Conference on Computer Science, Engineering and Education (CSEE 2021)*.
8. Reviewer in 2021 and 2022 for *Journal of Current Psychology*.
9. Editorial Advisory Board for Book "*Shifting to Online Learning Through Faculty Collaborative Support*", IGI Global, 2021. <https://www.igi-global.com/book/shifting-online-learning-through-faculty/258869>
10. Editorial Advisory Board for Book: "*eLearning Engagement in a Transformative Social Learning Environment*," IGI Global. 2021. <https://www.igi-global.com/book/elearning-engagement-transformative-social-learning/258872>
11. Reviewer for 2021 *Modeling, Estimation and Control Conference*, Oct 24-27th, Austin, Tx.
12. Reviewer for 3rd International Conference on Machine Learning & Applications (CMLA 2021). September 25 ~ 26, 2021, Toronto, Canada. <https://cseit2021.org/cmla/index>
13. Reviewer in July 2020 for Book Proposal for JBLearning (Jones & Bartlett Learning) for potential Cybersecurity Text “Secure Software Systems Development”
14. Reviewer for ASME (American Society Mechanical Engineers) DCSS 2020 Conference.

15. Member Technical Committee CSEE 2020, *International conference on Computer Science, Engineering and Education*.
16. Program Committee Member 2nd Int. Conf on Machine Learning and Applications (CMLA 2020), Copenhagen, Denmark.
17. Editorial Advisory Board, 2020, for forthcoming Book: *eLearning Engagement in a Transformative Social Learning Environment*. IGI-Global Publisher.
18. Editorial Advisory Board, 2020, for forthcoming Book: *Shifting to Online Learning through Faculty Collaborative Support*. IGI-Global Publisher.
19. Editorial Review Board 2019 for Book: Crawford C. Ed. *Confronting Academic Mobbing in Higher Education*, IGI-Global Publisher. (Reviewed 9 chapters).
20. Reviewer, CSEE Conference, , *International conference on Computer Science, Engineering and Education*, Barcelona Spain, 2020
21. Reviewer IEEE Control Systems Society Conference: 2010-2020 (3 paper in 2020, 6 papers in 2019)
22. Reviewer ASME Control Systems 2008-2015, 2017
23. Reviewer ASME Dynamic Systems Control Conference 2010-2019 (3 papers in 2020, 4 papers in 2019)
24. Vice President Education ISE (Institute of Software Engineers) 2006 and 2007
25. Board of Directors, ISE (Institute of Software Engineers) 2006 and 2007
26. Program Committee Member SDPS 2006 Conference
27. Program Committee Member SDPS 2007 Conference
28. Reviewer, SEDE 2008 Conference (17th International Conference) 2006, 2007, 2008
29. Reviewer OOPSLA workshop on Domain Specific Visual Languages, 2005–2010.
30. Reviewer, and panel member, for National Science Foundation's CISE portion of the Computer Science, Engineering, and Mathematics Scholarships Program (CSEMS) for FY 2000, in October 2000.
31. Reviewer, and panel member, for National Science Foundation's CISE (Computer Integrated Software Engineering) portion of the ENG/CISE Combined Research-Curriculum Development (CRCD) program in July of 1999.
32. Reviewer, and panel member, for National Science Foundation's CISE portion of the Computer Science, Engineering, and Mathematics Scholarships Program (CSEMS) 1999- 2000.
33. Reviewer and Program Committee Member of ASME Symposium on Computers in Engineering ETCE-ASME 1998
34. Reviewer and Program Committee Member of ASME Symposium on Computers in Engineering ETCE-ASME 1999
35. Committee Member for SDPS International Conf. on Integrated Design and Process Technology - December 1997.
36. Panel member on "Software Reuse within NASA" panel held at "A NASA Focus on Software Reuse", September 24-27, 1996, George Mason University, Fairfax, Virginia

37. Reviewer for the 8th IEEE International Conference on Tools with Artificial Intelligence, 1996.
38. Reviewer for Special Issue of International Journal of Artificial Intelligence Tools, 1995.
39. Reviewer for 1994 ACM regional conference in Tuscaloosa Alabama.
40. Session Co-chair for the "Computer Applications in Design and Process Technology" at the First International Conference for the Integration of Design and Process Technology (SDPS 1995).

ORGANIZATION MEMBERSHIPS

Global Association of Human Trafficking Scholars (GAHTS)
 HEAL Trafficking (Health, Education, Advocacy, Linkage)
 Human-Trafficking-and-health-care subgroup of HEAL
 Research subgroup of HEAL
 Education and Training subgroup of HEAL
 Pacific Links Foundation (a human trafficking non-profit organization)
 (ISEP) International Society for Educational Planning

HONORS AND AWARDS

- **Recipient of Faculty Development Leave Award (2022)**
- **Nominated by Software Engineering Students for UHCL Piper Award 2020-2021**
- **Requests to add scholarly works to university academic reading list.**
 - Emma Sansby, Head of Library Services, Bishop Grosseteste University, Library Services, Longdales Road, Lincoln, LN1 3DY, UK, on behalf of: Undergraduate Education Studies Degree Programme, Bishop Grosseteste University, Lincoln UK. Request to add to Undergraduate Education Studies Degree Programme reading list: Crawford, C., **White, S. A.**, & Wallace, J. Y. (2019). Editorial: Rethinking Pedagogy, Andragogy, and Heutagogy. *Academic Exchange Quarterly (AEQ)* ISSN 1096-1453, Volume 23(1), Chapter 5, 4-10.,
- **Curriculum Development Awards**
 - \$2500.00, Development of Introduction to Software Engineering Online. 2006
 - \$5000.00, Development of Software Reuse and Reengineering Online. 2004
 - \$2500.00, Development of Software Life Cycle Online. 2002
 - \$2500.00, Instructional Technology Faculty Development workshop. 1996
 - \$5000.00, Internal funding, web-based SWEN 4432 Software Engineering. 1999
 - \$5000.00, web-based Personal Software Process course, 2000.
 - \$3000.00, TQM Grant for "Software Architecture course development" Sept 19, 1997
 - \$1233.00, FDSF Computer Science Software Engineering Conference, 1995.
 - \$1735.00, FDSF 9th Software Engineering Education Conference, Daytona Florida, 1996.
 - \$1400.00, FDSF, 11th Software Engineering Education Conference, Feb. 1998.
- **Research Grants Awarded**
 - (\$153,345.00) Institute of Space Systems Operations, ISSO *UH-JSC AEROSPACE Post-doctoral fellowship*, Sharon A. White, Principle Investigator, Sept 21, 1995.
 - (\$150,000.00) Research Institute for Computing Information Systems, matching funds to ISSO *UH-JSC AEROSPACE Post-doctoral Fellowship*, Sharon A. White, Principle Investigator. 1995.
 - (\$20,922.36), Honeywell Inc. Houston Engineering Center, Houston, Texas, *Analysis of Information Exchange and Human-Centered Automation Tools in the Joint NASA/FAA*

program for Advanced Air Traffic Transportation Technologies, Sharon A. White PI. 12/01/97.

- (\$80,000.00) Boeing Sponsored *Summer Camp for Girls*, Boeing committed to 80,000 of matching funds for a matching NSF proposal of same name. (Boeing portion was committed monies depending on NSF funding).
- (\$2,000.00) FRSF: *Computer Science Summer Camp for Girls*: FRSF.
- (\$4,035.00) FRSF: *Graphical User Interface Generation project*, FRSF awarded
- (\$2,000.00) FRSF supplement award, 1998.
- (\$5,337.12) FRSF summer research award. 1998.
- (6,250.00) FRSF award. Research Assistant. Jan- May 1996.
- (6,250.00) FRSF award. Research Assistant. Sept 96 - May 1997.
- (4,000.00) TQM award, *Distance Education Support*: (Video conferencing equipment for IBM Austin Program) 1998
- (\$6,000 award) Research Institute for Computing Information Systems award. *Domain Specification and Design Language Generation Project*, 1995.
- (\$15,000) Research Institute for Computing Information Systems award. *Domain Specification and Design Language Generation Project*, 1996.
- (\$4,000.00) Research Institute for Computing Information Systems award. *.Domain Specification and Design Language Generation Project: 1995-1996*
- (\$2322.00) FRSF: *Software Architecture Design Language*
- **GRANT PARTICIPATION**
NSF 08-569 STEP-TYPE 1A, 9/28/2010. Collaborative Three STEPs: Enhancing Recruitment and Engagement in Computing Sciences and Physics through a High School/Community College/University Collaboration. STEM faculty personnel member.

SELECTED PROJECTS DIRECTED

- 2022 Crime detection: Apps development for improvement in Crime Reporting
- 2022 Crime detection: design of software to improve gunshot sound detection
- 2022 Software to analyze stock market trades to predict insider trading
- 2021 Software to implement Agile Ontologies
- 2021 Wiki Usability
- 2020 Application for Left-Handed Baseball Player Statistic tracking
- 2020 Big Data Network Analysis as applied to social networks: Implementation of a method to compute and analyze bid data graphs for a UTMB client.
- 2020 Continuous Integration Pipeline implementation using a Chat Bot

- 2020 Android Implementation and Web App implementation of prototype UHCL Mobile App for Students
- 2020 Room Reservation online web portal application
- 2020 Network Exposure: a project which tests and analyses big graph data collected from social networks.
- 2019 Game of Life Web Application / Mobile Phone Application.
- 2019 Mobile App Development of an FTP client.
- 2019 Department of Engineering Windows Mobile app for students to use to access pertinent information about Engineering at UHCL.
- 2019 Traffic Simulation Application
- 2019 Mobile app for a Music player with music recommendations based on user mood
- 2019 Mobile app for Movie Recommendations similar to Netflix but with improvements.
- 2018 Web-based Game Rubix Cube. 3x3 cube 3-dimensional interactive interface for play over as web application.
- 2018 Android App Development of the “Game of Life” the cellular automaton devised by the British mathematician John Horton Conway in 1970.
- 2018 Web-based Game Rubix Cube. 3x3 cube 3-dimensional interactive interface for play as a phone app.
- 2018 Windows App: Musical extensions to John Horton Conway’s Game of Life
- 2016 Traffic Control Simulation Project
- 2016 Traffic Management Controller App design and prototype development
- 2014 Horse Animation adding sound and extension to Horse Animation to extend Dressage Game
- 2014 Maya Horse Animation project
- 2012-2013 Windows App Development of a Dressage Game (an equestrian sport)
- 2013 Unity Game Development – 2013 Spacewalk serious game, joint project with Digital Media Studies Students
- 2012 Multiple Android and Windows Phone Application Development projects
- 2009-2011 Virtual World creation of the Moon using second life, ‘Moonscape project’
- 2007-2009 Virtual World creation of UHCL campus using second life “UHCL campus project”
- 2006 Mobile App development for Android phones, “Process Definition for a Change Request Support System” Project for Zach Casper at Smith Harris Group.
- 2006 Tietronix Corporation project: “Modeling Process models for DoD”
- 1996. Rockwell International (United Space Alliance) Project. Client Ron Schumaker. “Reverse engineering Hal-S to C Translator

- 1996. Rockwell International (United Space Alliance) project: "GPIP". Development of a record and playback GUI Development tool.
- 1996 Implementation of the generation of a GUI from a domain specification, "Graphical user interface generation": the project was an implementation of portions of my architecture design language research.
- 1997 Reverse engineering project : "Reverse Engineering DFR",
- 1997 A Software Inspection tool-development project: "Software Inspection Tool"
- 1997 Web commerce tool development project for Company: Mind's Eye Fiction.
- 1997 Nasa-sponsored project: "NASA EVA". Documentation and implementation of Nasa EVA armband software application.
- 1998 Honeywell Corporation Project: "AATP". Domain modeling of 14 project lines of 2005 next generation Air Traffic Control systems.

COURSE DEVELOPMENT

| | |
|----------------|---|
| SWEN 5931 | Soft Skills for Professional Engineers |
| SWEN 5328 | Innovation and Creativity |
| SWEN 5433 | Software Design |
| SWEN 4342/4432 | Introduction to Software Engineering |
| SWEN 4343/4432 | Software Engineering |
| SWEN 5233 | Software Architecture |
| SWEN 5534 | Reuse and Reengineering |
| SWEN 5432 | Software life Cycle |
| SWEN 6837 | Software Engineering Capstone |
| SWEN 6837 | Second Semester Capstone |
| SWEN 4435/4345 | Introduction to Personal Software Process |
| SWEN 5435 | Personal Software Process |
| CSCI 3133 | Programming in C (Face to Face only) |