Andrew L. Wright

University of Louisville
Information Systems, Analytics, and Operations Department
College of Business
Louisville, KY 40292
(502) 852-6098
Andrew.Wright@louisville.edu

Education:

1991 - 1994 University of Louisville, Speed Scientific School

Doctor of Philosophy in Computer Science and Engineering Dissertation Title: <u>The Development and Analysis of Hybrid</u>

<u>Fuzzy/Statistically-Based Controllers</u> Graduation: May 1994, GPA: 4.0

1990 - 1991 University of Louisville, Speed Scientific School

Master of Engineering in Engineering Mathematics and Computer Science Thesis Title: <u>Modeling and Control of Batch-to-Batch Polymer Processes</u>

Graduation: May 1991 with Highest Honors, GPA: 4.0

1986 - 1990 University of Louisville, Speed Scientific School

Bachelor of Science in Engineering Mathematics and Computer Science

Graduation: May 1990 with Highest Honors, GPA: 3.8

Work Experience:

Summer 2021 - Present Director of Learning Initiatives: University of Louisville, Digital

Transformation Center

Develop and implement academic and programmatic experiences for undergraduate and graduate students, faculty and staff; develop badges and micro credentials, certificates, and continuing education options; and offer specialized community, industry, healthcare, military, and executive workforce training. Manage day-to-day operations of UofL's IBM Skills

Academy offerings.

Fall 1996 - Present Assistant Professor (Tenured): University of Louisville, Information

Systems, Analytics, and Operations Dept., College of Business

Teach undergraduate classes in software development, data structures, analytics programming, operating systems, internet computing, business ethics, careers in information systems, project management, enterprise application development, information security, and computers and society.

Taught MBA class in computers and society. Taught MS in Business Analytics classes in analytics programming and applications of artificial

intelligence.

Spring 2004 – Sumer 2008 Director of Academic Technology: University of Louisville, Office of the

University Provost

Advised the university on all matters relating to academic technology, including student computing, classroom technology, and distance education. Led faculty IT governance committee and unit technology planning process.

Fall 1994 - Summer 1996 Lecturer: University of Louisville, Information Science and Data Processing/Computer Information Systems Dept. (College of Business) Taught undergraduate classes in computer literacy, C programming, and data structures.

Summer 1994

Part-Time Lecturer: University of Louisville, Engineering Mathematics and Computer Science Dept. Taught undergraduate class in discrete mathematics for computer scientists.

Spring 1992 - Spring 1994 Adjunct Lecturer: Indiana University Southeast, Div. of Natural Sciences Taught introductory calculus classes for engineering technology and business students.

Fall 1990 - Summer 1992 Graduate Teaching Assistant: University of Louisville, Engineering Mathematics and Computer Science Dept. Taught undergraduate classes in C programming, object-oriented programming with C++, and information structures.

Spring 1990 - Spring 1992 Graduate Research Assistant: University of Louisville, Engineering Mathematics and Computer Science Dept./CACI Inc./Dupont Worked on project with Naval Ordnance developing expert system for maintenance advice. Wrote C and CLIPS code.

> Worked with interdisciplinary group of researchers on control of sequential batch processes. Developed statistically-based controllers, performed simulations, and analyzed controller performance.

Worked with researchers on the effects of temperature on tool wear through NSF grant. Wrote software for data acquisition and established a tool wear model.

Research Interests: Fuzzy set and probability theory applied to supervisory/quality control, risk assessment and forecasting, neural networks, object-oriented design and programming, technology and social issues, usability, technologyassisted education, and cybersecurity education.

External Service:

Consulted with local organizations on PC issues including purchasing decisions, database design, etc.; Member of Journal of Information Systems Education Editorial Board.

Awards & Honors: 2019 Award for Excellence in Undergraduate Teaching from University of Louisville College of Business; 2016 Outstanding Faculty Award, Computer Information Systems from College of Business Student Council; 2011 Shared Vision Award from Tegrity, Inc.; 2009 Award for Excellence in Undergraduate Teaching from University of Louisville College of Business; 2007 Faculty Favorite from University of Louisville Delphi Center for Teaching and Learning; 2006 Disability Awareness Award for Outstanding Service; 1999 Award for Excellence in Undergraduate Teaching from University of Louisville College of Business and Public Administration; University of Louisville Fellowship Recipient; Honorable Mention - National Science Foundation Fellowship; Honorable Mention - Department of Energy Fellowship; 1991 Recipient of Simester Award for Scholastic Achievement; 1990 Recipient of Ernst Award for Highest Scholarship; Who's Who Among Students in American Universities; National Deans' List; Trustees Scholar; National Merit Scholar

Activities and Interests:

Tau Beta Pi (Engineering Honor Society); Sigma Xi (Scientific Research Society); Association for Computing Machinery; Beta Alpha Psi (Honorary).

Publications and Presentations:

- Refereed Journals
- Stoll, K., Ralston, P., Wright, A., & Harper, D. (1991). Modeling and Control of Batchto-Batch Polymer Processes. <u>Polymer Engineering and Science</u>, 31(23), 1684-1692.
- Ralston, P., Wright, A., Stoll, K., & Harper, D. (1993). Control Strategies for Cyclic Polymer Processes. <u>International Polymer Processing</u>, 8(4), 352-359.
- Srinivasan, S., Guan, J., & Wright, A. (1999). A new CIS curriculum design approach for the 21st century. Journal of Computer Information Systems, 39(3), 99-106.
- Dos Santos, B. L., & Wright, A. L. (2001). Internet-Supported Management Education. <u>Information Services & Use</u>, 21(2), 53-64.
- Zurada, J., Wright, A., & Graham, J. (2001). A neuro-fuzzy approach for robot system safety. <u>IEEE Transactions on Systems</u>, <u>Man</u>, and <u>Cybernetics</u>, <u>Part C</u>, <u>31</u>(1), 49-64.
- Barker, R. M., & Wright, A. L. (2002). Can Computers Motivate? The Association Between End User Computing Levels, Job Motivation, And Job Core Characteristics: A Field Study. The Review of Business Information Systems, 6(3), 29-41.
- Dos Santos, B. L. & Wright, A. L. (2006). Using bulletin-boards in an educational setting. Communications of the ACM, 49(3), 115-118.
- Attaway, A.A, Chandra, S., Dos Santos, B.L., Thatcher, M. & Wright, A.L. (2012). An Approach to Meeting AACSB Assurance of Learning Standards in an IS Core Course. <u>Journal of Information Systems Education</u>, 22(4), 357-368.

Book Chapters

Barker, R. M., Dos Santos, B. L., Hosapple, C. W., Wagner, W. P., & Wright, A. L. (2001). Tools for building information systems. In G. Salvendy (Ed.), <u>Handbook of Industrial Engineering: Technology and Operations Management</u> (3rd ed., pp. 65-109). New York: Wiley-InterScience.

Refereed Proceedings

- Wright, A., & Ralston, P. (1993). A Fuzzy, Statistically Based Hybrid Controller. <u>Proceedings of the 1993 International Fuzzy Systems and Intelligent Control Conference</u>, 137-144.
- Wright, A., Ralston, P., Stoll, K., Harper, D., & Leffew, K. (1993). Simulation and Control of a Multi-Stage Batch Operation with Measurement Constraints. <u>Proceedings of the 1993 American Control Conference</u>, 3, 2538-2541.
- Wright, A., & Ralston, P. (1994). A Preliminary Study of Hybrid Fuzzy/Statistically-Based Controllers. <u>Proceedings of the Third IEEE International Conference on Fuzzy Systems</u>, <u>1</u>, 549-554.

- Wright, A., & Ralston, P. (1994). Hybrid Fuzzy/Statistically-Based Controllers: A Preliminary Comparison. <u>Proceedings of the 1994 IEEE International Symposium on Intelligent</u> Control, 1-4.
- Wright, A., & Ralston, P. (1994). Application of Hybrid Fuzzy/Statistically-Based Control to Sampled Continuous Systems. <u>Proceedings of the 1994 International Fuzzy Systems and Intelligent Control Conference</u>, 122-130.
- Zurada, J., & Wright, A. (1996). Comparison of the performance of the neural network-and fuzzy logic-based decision units for a robot safety system. In C. H. Dagli (Vol. Ed.), Intelligent Engineering Systems Through Artificial Neural Networks: Vol. 6. Smart Engineering Systems: Neural Networks, Fuzzy Logic and Evolutionary Programming (pp. 209-214). ASME Press.
- Zurada, J., Karwowski, W., & Wright, A. (1996). A fuzzy logic-based decision unit for robot safety system. In W. Karwowski & R. J. Koubek (Eds.), <u>Manufacturing Agility and Hybrid Automation</u> (Vol. 1, pp. 580-583).IAE Press.
- Barker, R. M., & Wright, A. (1997). End user computing levels, job motivation and user perceptions of computing outcomes: a field investigation. In <u>Proceedings of the 1997 ACM SIGCPR Conference</u> (pp. 224-233).
- Wright, A., Srinivasan, S., & Guan, J. (1998). Design of a novel CIS curriculum for educating the information systems developers of the 21st century. <u>Proceedings of the 1998 Information System Educators Conference</u>, 103-108.
- Losavio, M., Hinton, J., Fritz, K., Lauf, A., Hieb, J, Im, G., Wright, A., Reed, J., Elmaghraby, A., Keeling, D., Gainous, J., Sun, J., Bergman, M. (2019). STEM for Public Safety in Cyber: Training for Local Law Enforcement and Cyber Security. <u>Proceedings of the 2019 IEEE Integrated STEM Education Conference (ISEC)</u>, in press.

Presentations and Workshops

- Graham, J., Brockman, G., Wright, A., & Ragade, R. (1992, September). <u>Hybrid Maintenance Advisory System for Naval Applications.</u> American Society of Naval Engineers 1992 Product Engineering Symposium, Louisville.
- Wright, A., Ralston, P., Stoll, K., & Harper, D. (1992, March). <u>Part-to-Part Control Strategies for Cyclic Polymer Processes</u>. Eighth Annual Meeting of the Polymer Processing Society, New Delhi.
- Srinivasan, S., Dos Santos, B., Gogan, J., & Wright, A. (1997, February). Electronic Commerce Workshop. Southeast Decision Sciences Institute, Atlanta.
- Srinivasan, S., Dos Santos, B. L., Gogan, J., & Wright, A. (1997, April). Electronic Commerce Workshop. ACM SIGCPR Conference, San Francisco.
- Srinivasan, S., & Wright, A. (1999, March). Setting Objectives Workshop. AACSB Outcome Assessment Seminar, Clearwater Beach.

- Srinivasan, S., & Wright, A. (1999, March). Stakeholder Involvement Workshop. AACSB Outcome Assessment Seminar, Clearwater Beach.
- Wright, A. L. (2004, September). <u>IT and the Academic Community: Bridging the Gap</u>, Breaking Down Barriers 2004 Kentucky Higher Education Computing Conference, Erlanger, Kentucky.
- Wright, A. L. (2005, May). <u>Web Accessibility 101: Universal Design in Action</u>, 2005 Kentucky Faculty Development Conference: Engaging Students for Success, Lexington, Kentucky.
- Wright, A. L. (2005, October). <u>Making the Web Accessible for All</u>, University of Louisville Celebration of Teaching and Learning, Louisville, Kentucky.
- Allison, J., Garn, M., Miller, K., & Wright, A. (2006, May) "Got Accessibility?" The Kentucky Web Developer Certification Project, 2006 Kentucky Faculty Development Conference: Redesigning Teaching and Learning for the 21st Century, Lexington, Kentucky.
- Allison, J., Wright, A., & Garn, M. (2006, October) "Got Accessibility?" The Kentucky Web Developer Certification, Breaking Down Barriers: Moving Forward Together! 2006 Kentucky Higher Education Computing Conference, Erlanger, Kentucky.
- Pattie, M., Bowers, J., Kleppinger, G., Wright, A., & Clinton, E. (2007, May) <u>Internet2 A New Frontier?</u>, 2007 Kentucky Conference on the Scholarship of Teaching and Learning: Engaging Campus and Community, Lexington, Kentucky.
- Wright, A. & Greenwell, M. (2008, May) <u>Accessible Learning: Virtual Barriers, Second Life, and Beyond</u>, 2008 Kentucky Conference on the Scholarship of Teaching and Learning: Challenging Students to Think Critically and Learn Deeply, Lexington, Kentucky.
- Kleppinger, G., Pattie, L., Miller, L., Jones, J., Wright, A., Clinton, E. (2008, May) <u>Internet2 in Kentucky: Taking the Next Steps</u>, 2008 Kentucky Conference on the Scholarship of Teaching and Learning: Challenging Students to Think Critically and Learn Deeply, Lexington, Kentucky.
- Kleppinger, G., Pattie, L., Miller, L., Jones, J., Wright, A., Clinton, E. (2008, May)

 <u>Networked Opportunities for Deep Learning</u>, 2008 Kentucky Conference on the Scholarship of Teaching and Learning: Challenging Students to Think Critically and Learn Deeply, Lexington, Kentucky.
- Wright, A. (2009, October) <u>Using Class Capture Tools to Support Effective Teaching and Learning</u>, Kentucky Convergence 2009: Sixth Annual Education Technology Conference in Kentucky, AIKCU, SAALCK, KDE, CPE, and The Center for Rural Development, Somerset, Kentucky.
- Wright, A., Bellina, V. (2010, April) <u>Rapid Response: Planning a Successful Tegrity Implementation</u>, 4th Annual Tegrity User Conference, Louisville, Kentucky.

Wright, A., Rigdon, C. (2011, April) <u>Faculty Training: Two Universities</u>, <u>One School of Thought</u>, 5th Annual Tegrity User Conference, Atlanta, Georgia.

Technical and Research Reports

Wright, A. (1994, February). <u>Managing Uncertainty in Chemical Risk Assessment: Data, Models, and Fuzzy Databases.</u> Louisville: University of Louisville.

Applied Articles

McGee, D., & Wright, A. (1995, March). Finding the shortest path between two points. Inside Visual Basic for Windows, 9-14.

Wright, A., & McGee, D. (1996, February). Why OOP? Inside Visual FoxPro, 10-14.

Contracts, Grants and Sponsored Research:

Funded

Wright, A. (Co-Principal), Srinivasan, S. (Principal), Guan, J. (Co-Principal), Kerrick, S. A. (Supporting), "Scholastic Excellence Scholarships in Computer Information Systems", National Science Foundation, \$599,495, Result of partnership/collaboration, Informal, K-12 Educational Initiatives, The project involves collaboration with Jefferson Community and Technical College (JCTC) and the Jefferson County Public Schools (JCPS) in identifying potential students (transfer and new, respectively) for the scholarships covered by the award. Took over as Co-PI in June 2012. (2010 - 2016).

Elmaghraby, A. (Principal), Im, G. (Co-Principal), Lauf, A. (Co-Principal), Losavio, M. (Co-Principal), Wright, A. (Co-Principal), "Cybersecurity Workforce Education - CNAP Initiatives", National Security Agency, \$580,068, projects funded are "Multi-modal Hands-on Cybersecurity Post-secondary Education" and "Bringing Public Safety Personnel into Cybersecurity Careers". (2017-2019)

Elmaghraby, A. (Principal), Im, G. (Co-Principal), Wright, A. (Co-Principal), "A Scholarship Proposal for Cybersecurity Workforce Development", Department of Defense, \$82,095. (2018-2019)

Kerrick, S. (Principal), Elmaghraby, A. (Co-Principal), Wright, A. (Co-Principal), et al., "Healthcare Cybersecurity Pathways", National Security Agency, \$5,998,645. (2020 – 2022)

Losavio, M. (Principal), Keeling, D. (Co-Principal), Wright, A. (Co-Principal), et al., "Law Enforcement Cyber Investigation and Cyber Security Enhancement Project", National Security Agency, \$831,738. (2020 – 2022)

Elmaghraby, A. (Principal), Zhang, W. (Co-Principal), Kerrick, S. (Co-Principal), Wright, A. (Co-Investigator), et al., "The National Cybersecurity Teaching Academy", National Security Agency, \$700,000. (2021-2023)