Ernest H. Page

Curriculum Vitae – January 2026

11505 Purple Beech Drive
Reston, VA 20191
+1 (703) 282 3473
epage@mitre.org
www.thesimguy.com
0009-0006-5752-3445
TC9GBIEAAAAJ

With over 30 years experience, primarily in the defense and intelligence simulation communities, my work has focused on modeling methods and the practical applications of concurrency to enhance simulation-based analysis, experimentation, mission rehearsal and training.

Personal

Nationality	U.S.
Clearances	TS/SCI w/ polygraph (active)
Fields of Interest	Modeling methods, simulation languages, human-in-the-loop applications, immersive environments, parallel and distributed algorithms and systems

Education

1994 **Ph.D.**, *Virginia Tech*, Computer Science [82]
1990 **M.S.**, *Virginia Tech*, Computer Science [86]
1988 **B.S.**, *Virginia Tech*, Computer Science

Employment History

Industry

2004–present **The MITRE Corporation, McLean, VA**

Management and Leadership Roles:

- *SIMEX Program Manager, Modeling and Analysis Innovation Center.* (03/22–11/24)
  Provided leadership and coordination for MITRE's SIMEX program, delivering operator-in-the-loop experimentation for CONOPS, Tactics, Techniques and Procedures (TTPs), and concept evaluation for multiple sponsors within the defense and civilian sectors.
- *DARPA Portfolio Manager, OSD/DISA Portfolio Division.* (10/19–09/20)
  Provided technical oversight and management of MITRE's support to DARPA. Program ranged from 35-40 STE annually, across seven DARPA Program Offices.
- *Division Chief Engineer, Modeling and Analysis Innovation Center.* (10/13–10/19)
  Principal administrator for the division's technical processes and procedures. Oversaw creation and execution of division staff development and research strategies, technical material review and public release practices, and laboratory investments. Assisted in defining division sponsor engagement strategy, and supported outreach and business development. Related publications: [68, 70, 71].

- *Founder and Director: Simulation, Experimentation and Analytics Lab (SEAL).* (01/14–10/19)
  Developed vision, design, concept of operations, and supervised construction of laboratory in MITRE 4, McLean, VA (completed January 2017). Supervised lab management staff. Worked with Center management and Corporate Lab Council to define lab strategy, business development, and technology insertion schedule. Related publications: [9].
- *Corporate Innovation Area Lead for M&S, MITRE Innovation Program.* (10/13–9/15)
  Defined strategy, conducted competition, and administered MITRE core M&S Independent Research and Development (IRAD) portfolio.

Principal Investigator and Project Leader roles:

- *SAFE-SiM.* (07/20–10/22)
  Led team supporting SAFE-SiM Program Manager in the development of an all-domain, Multi-Level Security (MLS) enabled Modeling and Simulation (M&S) environment to perform theater-wide, mission-level M&S for senior military decision makers. Sponsor: DARPA. Related publications: [13, 14].
- *National Space Program.* (11/16–01/21)
  Served as Senior Technical Advisor for enterprise analysis, campaign modeling and wargaming. Sponsor: NSP sponsor.
- *Air Force Experimentation.* (10/15–10/16)
  Surveyed USAF experimentation facilities, technologies and methods. Provided analysis and recommendations that supported the establishment of the Strategic Development Planning and Experimentation (SDPE) office at Wright-Patterson AFB, Dayton, OH. Sponsor: SAF/AQ. Related publications: [69].
- *SIMAF Support.* (10/14–10/15)
  Led MITRE support to USAF SIMAF. Focus on modeling and analytics in support of Intelligence, Surveillance and Reconnaissance Multi-Resolution Analysis (ISR MRA), and DARPA Air Dominance Initiative (ADI). Sponsor: US Air Force.
- *Advanced Manufacturing Strategy.* (02/12–06/13)
  Conducted broad survey of US and international initiatives in advanced manufacturing. Developed roadmap for MITRE engagement in the areas of: synthetic biology and biotechnology; nanotechnology; photonics; robotics; modeling, analysis and optimization; systems engineering; and supply chain risk assessment. Sponsor: MITRE IR&D. Related publications: [73].
- *Fast-Time Architectures for NextGen Modeling and Simulation.* (10/09–09/11)
  Developed grid computing frameworks to support simulation-based optimization methodologies for National Airspace System (NAS) models. Sponsor: MITRE IR&D. Related publications: [8, 29].
- *Mobile Network Modeling Institute.* (7/09–04/11)
  Investigated High Performance Computing (HPC) simulation frameworks to support representation of very large (e.g., million-node) mobile ad hoc wireless networks. Sponsor: Army Research Lab. Related publications: [30].

- *High Throughput Computing Clouds to Support Simulation as a Service.* (10/08–10/09)
  Developed techniques to facilitate low-latency user interactivity with mobile Semi-Automated Forces (SAF) components within a cloud computing architecture. Sponsor: MITRE IR&D. Related publications: [74].
- *High Performance, High Accuracy Electromagnetic Wave Propagation Modeling for Urban Environments.* (11/06–6/07)
  Integrated support for the Transmission Line Matrix (TLM) methodology into the Rensselaer Optimistic Simulation System (ROSS). Demonstrated ability to represent $O(10^6)$ mobile wireless radios in complex terrain. Sponsor: MITRE IR&D. Related publications: [33, 34, 35, 76].
- *Pandemic Influenza Study.* (12/05–9/07)
  Led the design and development of a federation of models to study the impact of pandemic flu on national telecommunications networks in the presence of widespread telecommuting. Sponsor: Department of Homeland Security (DHS) National Communications System. Related publications: [75].
- *U.S. Border Patrol Three-Tier Model and Study.* (10/04–7/05)
  Designed architecture for diverse applications of Border Patrol modeling and simulation based on OneSAF product line architecture concepts. Led design and development of a federation of MANA simulations to study technology, tactical infrastructure and agent trades at a Sector scale. Sponsor: Department Homeland Security. Related publications: [36].
- *Java Meets Simulation.* (1/04–9/04)
  Contributed to the development of the Tortuga simulation framework (Principal Investigator: Richard Weatherly). Developed performance benchmarks for Tortuga, and implemented $O(1)$ priority queues. Sponsor: MITRE IR&D. Related publications: [37, 38].

2001–2004 **Abstraction and Associates, Reston, VA (President)**

Provided consulting and simulation engineering services to U.S. Army.

- *Lead Scientist for the U.S. Army RDECOM MATREX.* (1/03–1/04)
  Along with the MATREX Chief Architect, led the design and development of the MATREX federation, and its support for Future Combat Systems (FCS). Led performance studies of major MATREX software components.
- *Technical Advisor to the U.S. Army Model and Simulation Office (AMSO).* (6/00–12/03)
  Provided technical guidance to the Director, AMSO, with respect to the development of Army model management policies and programs. Duties included: programmatic support to major Army simulation systems, including WARSIM, OneSAF, Joint Virtual Battlespace and the RDEC federation; defining the systems architecture concepts for the Simulation and Modeling for Acquisition, Requirements and Training (SMART) initiative; led efforts to formulate and document Grand Challenges for M&S; and supporting efforts to document M&S best practices. Supported the initiation of the *Journal of Defense Modeling and Simulation* (JDMS). Related publications: [4, 5, 28, 41, 42, 64].

1995–2001 **The MITRE Corporation, McLean, VA**

- *OneSAF Architecture Specification and Analysis.* (1/98–9/99)
  Conducted pre-RFP analysis and specification of system objectives. MITRE's role also involved coordination of related OneSAF R&D undertaken at SAIC, Lockheed Martin and within the Defence Evaluation and Research Agency (DERA) in the UK. Sponsor: U.S. Army. Related publications: [16].
- *Theory and Practice in User-Composable Simulation Systems.* (10/98–9/99)
  Characterized the fundamental aspects and limitations of composability as a system design principle based on computability and complexity theory. Sponsor: DARPA. Related publications: [12, 39, 43].
- *Web-Based Simulation Support.* (10/96–12/98)
  Evaluated emerging web-based technologies for their use as distributed simulation infrastructure. Sponsor: MITRE IR&D. Related publications [6, 17, 45, 46, 48, 50, 51, 65, 66].
- *Aggregate Level Simulation Protocol (ALSP) Joint Training Confederation (JTC).* (2/95–6/98)
  Provided support in Systems Engineer role to the ALSP JTC. Comprised of up to 12 Service and Joint simulation systems, the JTC was employed to support several large-scale Command-Post Exercises (CPXs) annually, in the United States, Europe and Asia. Activities in support of the ALSP project included: review and evaluation of JTC functional evolution designs, generation and review of JTC test plans, JTC test coordination and reporting, VV&A process development and execution, protocol maintenance and evolution, model specification maintenance and evolution, and exercise support. Sponsor: U.S. Army. Related publications: [21, 49, 52, 53, 54, 56, 57, 67, 77, 78, 79, 80].

Academia

2011 **University of Virginia, Charlottesville, VA (Research Faculty)**

Served in the Department of Systems and Information Engineering to support UVA's participation within the Commonwealth Center for Advanced Manufacturing (CCAM). (4/11–4/12)

2000 **Northern Virginia Community College, Sterling, VA (Adjunct Faculty)**

Courses taught: *Introduction to Information Systems*; *Event-Driven Basic II*. (1/00–5/00)

1993 **Radford University, Radford, VA (Instructor)**

Courses taught: *Problem Solving and Programming*; *Discrete Mathematics for Computer Science*. (8/93–12/93)

1988–1994 **Virginia Tech Systems Research Center, Blacksburg, VA (Graduate Research Assistant)**

Supported numerous simulation projects/studies and served as computer systems administrator for SRC computing facilities. (5/88–11/94)

Professional Recognition and Service

Honors and Awards

Association for Computing Machinery (ACM)
- Senior Member, 2020–present

ACM Special Interest Group on Simulation (SIGSIM)
- Distinguished Contributions Award, 2020
- Service Award, 1997, 2003

MITRE
- Officer's Award, 2015
- Director's Award, 1997, 2007

Upsilon Pi Epsilon, Honor Society in the Computing Sciences, inducted 1990

Elected Office

ACM SIGSIM
- Chair, 1999–2001
- Vice Chair, 1997–1999
- Secretary/Treasurer, 1995–1997

Society for Computer Simulation International (SCS), Director at Large, 2002–2003

Appointments

ACM SIGSIM Advisory Board, 2008–present

Computer Simulation Archive Advisory Board, 2022–2025

Defense Science Board, Task Force on Gaming, Exercising, Modeling, and Simulation (GEMS), 2018–2019

Conference and Workshop Organization

Board of Directors

Winter Simulation Conference (2001-2012)

Conference Chairmanship

General Chair, 2025 International Conference on Principles of Advanced Discrete Simulation (PADS), Santa Fe, NM, 23-26 June 2025.

General Chair, 2017 Winter Simulation Conference, Las Vegas, NV, 3-6 December 2017.

Program Co-Chair, 2004 Workshop on Parallel and Distributed Simulation, Kufstein, Austria, 16-19 May 2004.

Program Organizer, Dagstuhl Seminar on Grand Challenges for Modeling and Simulation, August 2002.

Program Chair, First International Conference on Grand Challenges for Modeling and Simulation, San Antonio, TX, 27-31 January 2002.

Program Chair, 1999 SCS International Conference on Web-Based Modeling and Simulation, San Francisco, CA, 17-20 January 1999.

Program Committee

Agent-Directed Simulation, 2005-2007.

AI, Simulation and Planning Conference, 2000, 2002, 2004.

AsiaSim, 2013.

Conference on Enabling Technology for Simulation Science, 1998.

European Simulation Multiconference, 1999.

Intl. Conference on Human-Computer Interface Advances for Modeling and Simulation, 2005.

International Conference on Web-Based Modeling and Simulation, 1998, 2000, 2001.

National Science Foundation (NSF), Workshop on Research Challenges in Modeling and Simulation for Engineering Complex Systems, 2016

SIMULTECH, 2012,2013.

Workshop on Parallel and Distributed Simulation, 2000, 2002-2005.

Workshop on Principles of Advanced and Distributed Simulation, 2006, 2009, 2012-present.

Track Coordinator

Simulation Interoperability Workshop (Testing Forum), 1997.

Winter Simulation Conference (Modeling Methodology: 2000; Military Applications: 1999,2006)

Invited Presentations

Conference Keynotes

Beyond Speedup Revisted: PADS, the HLA, Websim and the Cloud, Workshop on Modeling and Simulation on Grid and Cloud Computing, Ottawa, ON, Canada, 13-16 May 2012.

Beyond Speedup: PADS, the HLA and Web-Based Simulation, 13th Workshop on Parallel and Distributed Simulation, Atlanta, GA, 1-4 May 1999.

Seminars

Thoughts on Science and Military Simulation, given at the SimScience Workshop, National Defense University, Washington, DC, 4-6 June 2002.

The ALSP Joint Training Confederation – A Case Study of Federation Testing and VV&A, given to the Computer Science Graduate Colloquium, Old Dominion University, 21 November 1997.

Advanced Distributed Simulation through the Aggregate Level Simulation Protocol, given to the Virginia Tech Graduate Seminar, Department of Computer Science, 8 November 1995.

Simulation Model Specification: On the Role of Model Representation in the Model-Centered Sciences, given to the ORSA Computer Science Technical Session Conference, Williamsburg, VA, 5 January 1994.

Editorial Activities

Advisory Board

Journal of Simulation, 2005-present.

Associate Editor

SCS Simulation, 2001-present.

Journal of Defense Modeling and Simulation, 2003-2019.

ACM Transactions on Modeling and Computer Simulation, 1999-2008.

IEEE Transactions on Systems, Man and Cybernetics, 2000-2001.

Consulting Editor

Journal of Defense Modeling and Simulation, 2019-present.

Guest Editor

ACM Transactions on Modeling and Computer Simulation, Special Issue on PADS 2025, 35(4), October 2025.

SCS Simulation, Special Issue on Parallel and Distributed Simulation, 81(4), April 2005.

SCS Simulation, Special Issue on Grand Challenges for Modeling and Simulation, 80(9), (with W.H. Lunceford), September 2004.

Future Generation Computer Systems, Special Section: Best of WEBSIM 99, 17(5), (with A.G. Bruzzone and A. Uhrmacher),March 2001.

ACM Transactions on Modeling and Computer Simulation, Special Issue on Web-Based Modeling and Simulation, 10(1), January 2000.

Publications

Proceedings Edited

[1] Ernest Page and Lin Uhrmacher, editors. *Proceedings of the 39th ACM SIGSIM Conference on Principles of Advanced Discrete Simulation*, Santa Fe, NM, 23-26 June 2025.

[2] W. K. V. Chan, A. D'Ambrogia, G. Zacharewicz, N. Mustafee, G. Wainer, and E. Page, editors. *Proceedings of the 2017 Winter Simulation Conference*, Las Vegas, NV, 3-6 December 2017. 4389 pages.

[3] Ernest H. Page, A.L.M. Thom Mclean, Johannes Luthi, and Axel Lehman, editors. *Proceedings of the 18th Workshop on Parallel and Distributed Simulation*, Kufstein, Austria, 16-19 May 2004. 205 pages.

[4] Richard Fujimoto, Wendell H. Lunceford, Ernest H. Page, and Adelinde M. Uhrmacher, editors. *Proceedings of the Dagstuhl Seminar on Grand Challenges for Modeling and Simulation*, Dagstuhl, Germany, 25-30 August 2002. 75 pages.

[5] Ernest H. Page and Wendell H. Lunceford, editors. *Proceedings of the First International Conference on Grand Challenges for Modeling and Simulation*, San Antonio, TX, 27-31 January 2002. 103 pages.

[6] Ernest H. Page, Agostino G. Bruzzone, and Adelinde Uhrmacher, editors. *Proceedings of the 1999 International Conference on Web-Based Modeling and Simulation*, SCS Simulation Series 31(3), San Francisco, CA, 17-20 January 1999. 255 pages.

Books Edited

[7] Richard Fujimoto, Conrad Bock, Wei Chen, Ernest H. Page, and Jitesh Panchal, editors. *Research Challenges in Modeling and Simulation for Engineering Complex Systems*. Simulation Foundations, Methods and Applications. Springer, 2017.

Chapters in Books

[8] Matthew T. McMahon, Brian M. Wickham, and Ernest H. Page. An architecture for low overhead grid, hpc and cloud-based simulation as a service. In José Luis Risco Martín, Saurabh Mittal, and Tuncer Ören, editors, *Simulation for Cyber-Physical Systems Engineering: A Cloud-Based Context*, chapter 13, pages 321–348. Springer, 2021.

[9] Richard J. Haberlin and Ernest H. Page. Visualization support to strategic decision making. In Curtis Blais, Charles Turnista, and Andreas Tolk, editors, *Simulation and Wargaming*. John Wiley and Sons, 2020.

[10] Ernest H. Page. Modeling and simulation technology landscape. In Saurabh Mittal, Umut Durak, and Tuncer Ören, editors, *Guide to Simulation-Based Disciplines – Advancing Our Computational Future*, Simulation Foundations, Methods and Applications, chapter 2. Springer, 2017.

[11] Osman Balci, George L. Ball, Katherine L. Morse, Ernest Page, Mikel D. Petty, Andreas Tolk, and Sandra N. Veautour. Model reuse, composition and adaptation. In Richard Fujimoto, Conrad Bock, Wei Chen, Ernest Page, and Jitesh H. Panchal, editors, *Research Challenges in Modeling and Simulation for Engineering Complex Systems*, Simulation Foundations, Methods and Applications, chapter 6. Springer, 2017.

[12] Ernest H. Page. Theory and practice for simulation interconnection: Interoperability and composability in defense simulation. In Paul A. Fishwick, editor, *Handbook of Dynamic System Modeling*, CRC Computer and Information Science Series, chapter 16. Chapman and Hall, 2007.

Journals

[13] Emmet R. Beeker III, Jose L. Bricio-Neto, Doug Flohr, Matthew T. K. Koehler, Ernest H. Page, and Andreas Tolk. Applying new metrics to detect and enumerate kill paths. *Military Operations Research*, 30(2):5–24, 2025.

[14] Matthew T. K. Koehler, Jose L. Bricio-Neto, Ernest H. Page, and Andreas Tolk. Applying complex adaptive systems research results to combat simulation of the generation-after-next. *Journal of Defense Modeling and Simulation*, 23(1):3–17, 2024.

[15] Ernest H. Page and Marc Abrams. Simulation model development and analysis in UNITY. *Annals of Operations Research*, 104:181–212, April 2002.

[16] Ernest H. Page and Jeffrey M. Opper. Investigating the application of web-based simulation principles within the architecture for a next-generation computer generated forces model. *Future Generation Computer Systems*, 17:159–169, 2000.

[17] Ernest H. Page, Arnold Buss, Paul A. Fishwick, Kevin J. Healy, Richard E. Nance, and Ray J. Paul. Web-based simulation: Revolution or evolution? *ACM Transactions on Modeling and Computer Simulation*, 10(1):3–17, January 2000.

[18] Richard E. Nance, C. Michael Overstreet, and Ernest H. Page. Redundancy in model specifications for discrete event simulation. *ACM Transactions on Modeling and Computer Simulation*, 9(3):254–281, July 1999.

[19] Ernest H. Page and Richard E. Nance. Incorporating support for model execution within the condition specification. *Transactions of the SCS*, 16(2):47–62, June 1999.

[20] Ernest H. Page. Zero lookahead in a distributed time-stepped simulation. *Simulation Digest*, 26(2):4–13, September 1997.

[21] Ernest H. Page, Bradford S. Canova, and John A. Tufarolo. A case study of verification, validation and accreditation for advanced distributed simulation. *ACM Transactions on Modeling and Computer Simulation*, 7(3):393–424, July 1997.

[22] Ernest H. Page. Book review – a revolution in simulation. *ACM Transactions on Modeling and Computer Simulation*, 4(4):368–369, October 1994.

[23] Ernest H. Page. In defense of discrete event simulation (technical correspondence). *ACM Transactions on Modeling and Computer Simulation*, 3(4):281–286, October 1993.

[24] Ernest H. Page. The condition specification: Revisiting its role within a hierarchy of simulation model specifications. *Simulation Digest*, 22(3):11–33, Spring 1993.

Conference and Workshop Proceedings

[25] Ernest H. Page, James R. Thompson, and Matthew Koehler. Sic semper simulation – balancing simplicity and complexity in modeling and analysis. In *Proceedings of the 2021 Winter Simulation Conference*, Phoenix, AZ, 13-15 December 2021.

[26] Andreas Tolk, Ernest H. Page, and Saurabh Mittal. Hybrid simulation for cyber physical systems – state of the art and a literature review. In *Proceedings of the 2018 SpringSim-ANSS*, Baltimore, MD, 15-18 April 2018.

[27] Andreas Tolk, Brian L. Heath, Martin Ihrig, Jose J. Padilla, Ernest H. Page, E. Dante Suarez, Claudia Szabo, Paul Weirich, and Levent Yilmaz. Epistemology of modeling and simulation. In *Proceedings of the 2013 Winter Simulation Conference*, pages 1152–1166, Washington, DC, 8-11 December 2013.

[28] Simon Taylor, Paul Fishwick, Richard Fujimoto, Adelinde Uhrmacher, Ernest H. Page, and Gabriel Wainer. Panel on grand challenges for modeling and simulation. In *Proceedings of the 2012 Winter Simulation Conference*, pages 2614–2628, Berlin, Germany, 9-12 December 2012.

[29] Ernest H. Page, Laurie Litwin, Matthew T. McMahon, Brian Wickham, Mike Shadid, and Elizabeth Chang. Goal-directed grid-enabled computing for legacy simulations. In *Proceedings of the 12th IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing*, pages 183–189, Ottawa, ON, Canada, 13-16 May 2012.

[30] Brian Rivera, John A. Tufarolo, Gary Comparetto, Vinay Lakshminarayan, Mohammad Mirhakkak, Ernest H. Page, Nancy Schult, and David Yoo. An HLA-based approach to quantify achievable performance for tactical edge applications. In *Proceedings of the 2011 Spring Simulation Interoperability Workshop*, pages 11S–SIW–028, Boston, MA, 4-8 April 2011.

[31] Tobin Bergen-Hill and Ernest H. Page. Out-of-order execution and structural equivalence of simulation models. In *Proceedings of the 2010 Winter Simulation Conference*, pages 466–478, Baltimore, MD, 5-8 December 2010.

[32] Osman Balci and Ernest H. Page. Potential technologies for engineering network-centric simulations. In *Proceedings of the 2009 Summer Simulation Conference*, pages 470–475, San Diego, CA, 2009.

[33] David W. Bauer, Matthew McMahon, and Ernest H. Page. An approach for the effective utilization of GPUs in parallel combined simulation. In *Proceedings of the 2008 Winter Simulation Conference*, pages 695–702, Miami, FL, 7-10 December 2008.

[34] David W. Bauer and Ernest H. Page. Optimistic parallel discrete event simulation of the event-based transmission line matrix method. In *Proceedings of the 2007 Winter Simulation Conference*, pages 676–684, Washington, D.C., 9-12 December 2007.

[35] David W. Bauer and Ernest H. Page. An approach for incorporating rollback through perfectly reversible computation in a stream simulator. In *Proceedings of the 2007 Workshop on Principles of Advanced and Distributed Simulation*, pages 171–178, San Diego, CA, 2007.

[36] Emmet Beeker and Ernest H. Page. A case study of the development and use of a MANA-based federation for studying U.S. border operations. In *Proceedings of the 2006 Winter Simulation Conference*, pages 841–847, Monterey, CA, 3-6 December 2006.

[37] William Weiland, Richard Weatherly, Keven Ring, Ernest H. Page, Robert Mikula, and Fred Kuhl. Simplified concurrency: A java simulation framework. In *Proceedings of the Object-Oriented Programming, Systems, Languages and Applications Conference*, 2005.

[38] Richard M. Weatherly and Ernest H. Page. Efficient process interaction simulation in java: Implementing co-routines within a single java thread. In *Proceedings of the 2004 Winter Simulation Conference*, pages 1437–1443, Washington, D.C., 5-8 December 2004.

[39] Ernest H. Page, Richard Briggs, and John A. Tufarolo. Toward a familiy of maturity models for the simulation interconnection problem. In *Proceedings of the 2004 Spring Simulation Interoperability Workshop*, pages 04S–SIW–145, Arlington, VA, 18-23 April 2004.

[40] Jerry Banks, Joseph C. Hugan, Peter Lendermann, Charles McLean, Ernest H. Page, C. Dennis Pegden, Onur Ulgen, and James R. Wilson. The future of the simulation industry. In *Proceedings of the 2003 Winter Simulation Conference*, pages 2033–2043, New Orleans, LA, 7-10 December 2003.

[41] Ernest H. Page. Thoughts on science and military simulation. In *Proceedings of the SimScience Workshop*, National Defense University, Washington, D.C., 4-6 June 2002.

[42] Ernest H. Page and Wendell H. Lunceford. Architectural principles for the U.S. Army's Simulation and Modeling for Acquisition, Requirements and Training (SMART) initiative. In *Proceedings of the 2001 Winter Simulation Conference*, pages 767–770, Washington, D.C., 9-12 December 2001.

[43] Ernest H. Page and Jeffrey M. Opper. Observations on the complexity of composable simulation. In *Proceedings of the 1999 Winter Simulation Conference*, pages 553–560, Phoenix, AZ, 5-8 December 1999.

[44] Ernest H. Page, David M. Nicol, Osman Balci, Richard M. Fujimoto, Paul A. Fishwick, Pierre L'Ecuyer, and Roger Smith. Strategic directions in simulation research. In *Proceedings of the 1999 Winter Simulation Conference*, pages 1509–1520, Phoenix, AZ, 5-8 December 1999.

[45] Ernest H. Page. Beyond speedup: PADS, the HLA and web-based simulation. In *Proceedings of the 13th Workshop on Parallel and Distributed Simulation*, pages 2–9, Atlanta, GA, 1-4 May 1999.

[46] Ernest H. Page. The rise of web-based simulation: Implications for the high level architecture. In *Proceedings of the 1998 Winter Simulation Conference*, pages 1663–1668, Washington, D.C., 13-16 December 1998.

[47] Ernest H. Page and Roger Smith. Introduction to military training simulation: A guide for discrete event simulationists. In *Proceedings of the 1998 Winter Simulation Conference*, pages 53–60, Washington, D.C., 13-16 December 1998.

[48] Ernest H. Page, Sean P. Griffin, and S. Lynn Rother. Providing conceptual framework support for distributed web-based simulation within the high level architecture. In *Proceedings of SPIE: Enabling Technologies for Simulation Science II*, pages 287–292, Orlando, FL, 13-17 April 1998.

[49] David Prochnow, Ernest H. Page, and Bryan Youmans. Development of a federation management tool: Implications for HLA. In *Proceedings of the 1998 Spring Simulation Interoperability Workshop*, Orlando, FL, 9-13 March 1998.

[50] Ernest H. Page, Arnold Buss, Paul A. Fishwick, Kevin J. Healy, Richard E. Nance, and Ray J. Paul. The modeling methodological impacts of web-based simulation. In *Proceedings of the 1998 SCS International Conference on Web-Based Modeling and Simulation*, pages 123–128, San Diego, CA, 11-14 January 1998.

[51] Ernest H. Page, Robert L. Moose, and Sean P. Griffin. Web-based simulation in simjava using remote method invocation. In *Proceedings of the 1997 Winter Simulation Conference*, pages 468–474, Atlanta, GA, 7-10 December 1997.

[52] Ernest H. Page and William E. Babineau. The ALSP joint training confederation: A case study of federation testing. In *Proceedings of the 1997 Fall Simulation Interoperability Workshop*, pages 377–386, Orlando, FL, 8-12 September 1997.

[53] Sean P. Griffin, Ernest H. Page, C. Zachary Furness, and Mary C. Fischer. Providing uninterrupted training to the joint training confederation (JTC) audience during transition to the high level architecture (HLA). In *Proceedings of the 1997 Fall Simulation Interoperability Workshop*, pages 887–893, Orlando, FL, 8-12 September 1997.

[54] David Prochnow, Ernest H. Page, and Mary C. Fischer. Management of the joint training confederation family of specifications. In *Proceedings of the 1997 Spring Simulation Interoperability Workshop*, Orlando, FL, 3-6 March 1997.

[55] Richard E. Nance, C. Michael Overstreet, and Ernest H. Page. Redundancy in model representation: A blessing or a curse? In *Proceedings of the 1996 Winter Simulation Conference*, pages 701–707, Coronado, CA, 8-11 December 1996.

[56] John A. Tufarolo and Ernest H. Page. Evolving the VV&A process for the ALSP joint training confederation. In *Proceedings of the 1996 Winter Simulation Conference*, pages 952–958, Coronado, CA, 8-11 December 1996.

[57] Richard M. Weatherly, Annette L. Wilson, Bradford S. Canova, Ernest H. Page, Anita A. Zabek, and Mary C. Fischer. Advanced distributed simulation through the aggregate level simulation protocol. In *of the 29th Hawaii International Conference on System Sciences*, pages 407–415, Wailea, Hawaii, 3-6 January 1996.

[58] C. Michael Overstreet, Ernest H. Page, and Richard E. Nance. Model diagnosis using the condition specification: From conceptualization to implementation. In *Proceedings of the 1994 Winter Simulation Conference*, pages 566–573, Orlando, FL, 12-15 December 1994.

[59] Ernest H. Page and Richard E. Nance. Parallel discrete event simulation: A modeling methodological perspective. In *Proceedings of the 8th Workshop on Parallel and Distributed Simulati*, pages 88–93, Edinburgh, UK, 6-8 July 1994.

[60] Marc Abrams, Ernest H. Page, and Richard E. Nance. Linking simulation model specification and parallel execution through UNITY. In *Proceedings of the 1991 Winter Simulation Conference*, pages 223–232, Phoenix, AZ, 8-11 December 1991.

[61] Marc Abrams, Ernest H. Page, and Richard E. Nance. Simulation program development by stepwise refinement in UNITY. In *Proceedings of the 1991 Winter Simulation Conference*, pages 233–242, Phoenix, AZ, 8-11 December 1991.

[62] Osman Balci, Richard E. Nance, E. Joseph Derrick, Ernest H. Page, and John L. Bishop. Model generation issues in a simulation support environment. In *Proceedings of the 1990 Winter Simulation Conference*, pages 257–263, New Orleans, LA, 9-12 December 1990.

[63] Ernest H. Page and Richard E. Nance. Model generators: An example of evolutionary prototyping. In *Proceedings of the 19th Annual Virginia Computer Users Conference*, pages 19–28, Blacksburg, VA, 8-10 September 1989.

Magazines

[64] Ernest H. Page. On software and systems architecture – toward an architecture for SMART. *Simulation Technology Magazine*, 4(2), January 2001. Published by: Simulation Interoperability Standards Organization.

[65] Ernest H. Page. Web-based simulation technology. *Simulation Technology Magazine*, 1(1), September 1998. Published by: Simulation Interoperability Standards Organization.

[66] Ernest H. Page. Web-based simulation. *The Edge*, August 1998. The MITRE Advanced Technology Newsletter.

[67] Ernest H. Page and Richard M. Weatherly. Advanced distributed simulation: It's about time, and state. *The Technology Track*, 1(2), April 1998. MITRE Division W150 Newsletter.

Technical Reports

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