

Harry J. Foxwell, Ph.D.
Curriculum Vitae, March 2023
9804 Ward Court, Fairfax VA 22032
703-304-3838 (mobile)
hfoxwell@gmu.edu
<https://cs.gmu.edu/~hfoxwell/>

Education:

Ph.D., Information Technology, George Mason University, 2003

- Dissertation: *MARVIN: A Web-based System for Representing, Visualizing, and Retrieving Analogies*
- Doctoral Committee:
 - Chair & Advisor: Daniel A. Menascé, University Professor of Computer Science, George Mason University, ACM & IEEE Fellow
 - Peter Denning, Past President, ACM, Distinguished Professor, Chairman of the Computer Science Department, Naval Postgraduate School
 - Gheorghe Tecuci, Professor of Computer Science, George Mason University
 - Nada Dabbagh, Associate Professor, Graduate School of Education, George Mason University

M.S., Applied Statistics, Villanova University, 1978

B.A., Mathematics, Franklin & Marshall College, 1973

Employment: Teaching:

Associate Professor, George Mason University, College of Engineering and Computing, Department of Information Sciences and Technology, Fairfax, VA, January 2017 to present.

- Currently teaching (Spring 2023):
 - AIT-580 – *Big Data Analytics*; Course Developer & Coordinator for Data Analytics curriculum
 - IT-471 – *Big Data on Cloud Systems* (Developed course for BSIT Cloud Computing Concentration)
- Other courses recently taught (on-campus and online):
 - Developed and taught interactive online course (AIT-580)
 - Developed and taught *Laws and Ethics of Big Data* (AIT-679)
 - AIT 622 – *Big Data Needs Analysis*

Adjunct Professor, Computer Science Department, George Mason University, 2004 – 2016

- Adjunct Courses Previously Taught:
 - CS 571 - Operating Systems
 - EC 511 - Electronic Commerce
 - CS 105 - Computer Ethics
 - INFS 640 - Electronic Commerce
 - CS 671- Advanced Operating Systems
 - ISA 673- Operating System Security
 - INFS 515 - Computer Architecture
 - INFS 772 - Enterprise Architecture
 - AIT 614 – Big Data Essentials

Employment: Industry:

Principal Consultant, Oracle Corporation (acquired Sun Microsystems Federal, Inc. February 2010); Reston, VA, April 1996 to January 2017

- Provided technical consultations and training for Oracle's Public Sector colleagues and customers concerning Cloud Computing, Big Data, OS virtualization technologies, operating system features for Solaris and Linux, including technical presentations, solution recommendations, and tutorials on related Internet technologies

UNIX System Engineer, Sun Microsystems; Vienna, VA, January 1995 to April 1996

- Provided UNIX-related technical support to system integrators doing business with the Federal Government. Responsible for proposal preparation, technical solutions, benchmarks, and technical presentations. Specialized in operating systems, virtualization, Internet technologies, including Java, Web servers, and network security hardware and software

UNIX Software Consultant, Digital Equipment Corporation; Washington, DC, April 1989 to January 1995

- Provided UNIX- and OSF/1-related technical support for government RFPs, technical solution proposals, formal benchmarks, and live test demonstrations. Also responsible for technical presentations to customers, and for strategic feedback from customers to product management and engineering

Senior Systems and Network Engineer, American Chemical Society, Washington, DC, Aug 1983 to Apr 1989

- Provided system programming, security, administration, and technical support for ULTRIX-based DEC VAX 785s and UNIX V-based NCR Towers, serving 400 users

Survey Statistician, American Chemical Society, Washington, DC, November 1978 to August 1983

- Conducted survey research: designed questionnaires, supervised data collection, analyzed and reported findings. Wrote computer programs for statistical analysis

Publications:

Research:

- Rytikova, L., Liao, D., Olesova, L., Boicu, M., & Foxwell, H. (2023 accepted). *Cognitive presence learning for graduate engineering education*. In The ASEE Southeastern Section Annual Conference Proceedings.
- Curriculum Impact Grant, Mason: *Building a Highly Qualified, Creative, and Adaptable STEM Workforce through Collaborative Multi-disciplinary Research in Data Science Graduate Programs* Participants: Ioulia Rytikova (Project Leader), Mihai Boicu, Harry Foxwell, James Baldo. Performance period: Summer, 2020 – Summer, 2021
- Rytikova, I., Foxwell, H., Baldo, J., & Boicu, M. (2020). *Developing and Validating Learning Modules for Strengthening MS Graduates' Applied Research Skills*. In Proceedings of the 2020 Innovations in Teaching & Learning (ITL) conference, George Mason University, Fairfax, Virginia, September 24, 2020

Books:

- *Creating Good Data*, H. Foxwell, Apress, 2020, <https://www.apress.com/us/book/9781484261026>
- *Oracle Solaris 11 System Administration Handbook*, H. Foxwell and G. Foster, McGraw-Hill Education, 2016
- *Oracle Solaris 11 System Administration: The Complete Reference*, H. Foxwell, M. Jang, C. Tran, and A. Formy-Duval, McGraw-Hill Education, 2013
- *Pro OpenSolaris*, H. Foxwell and C. Tran, Apress, 2009

Chapters:

- Tanque, M., and Foxwell, H., *Cyber Risks on IoT Platforms and Zero Trust Solutions*, Advances in Computers, Volume 131 (Elsevier), 2023 (submitted)
- Tanque, M., and Foxwell, H., [The Intersection of Data Analytics and Data-Driven Innovation](#), IGI-Global, 2020.
- Tanque, M., and Foxwell, H., [Cyber Resilience for the Internet of Things](#), IGI-Global, 2019.
- Tanque, M., and Foxwell, H., [Big Data and Cloud Computing: A Review of Supply Chain Capabilities and Challenges](#), IGI-Global, 2018.

Technical Articles:

- Foxwell, H., Gove, D., Savit, J., van der Pas, R., and Victor, J., [READ ME FIRST: What Do I Do with All of Those SPARC Threads?](#), An Oracle Technical White Paper, August 2013
- Foxwell, H., Born, G., and Venkataraman, G., *Oracle's Cloud Solutions for Public Sector*, Oracle Corporation, April 2011
- Foxwell, H., Lageman, M., Pronk, J., Rozenfeld, I., Setty, S., and Victor, J., [The Sun BluePrints Guide to Solaris Containers: Virtualization in the Solaris Operating System](#), Sun BluePrints Online, October 2006
- Foxwell, H., and Rozenfeld, I., [Slicing and Dicing Servers: A Guide to Virtualization and Containment Technologies](#), Sun BluePrints Online, October 2005
- Foxwell, H. and Menascé, D., *A Web-Based System for Representing, Retrieving, and Visualizing Analogies*, World Wide Web: Internet and Web Information Systems Journal, Kluwer Academic Publishers, Volume 7, No. 4, October 2004.
- Foxwell, H., *MARVIN: A Web-based System for Representing, Visualizing, and Retrieving Analogies*, Doctoral Dissertation, George Mason University, School of Information Technology and Engineering, May 2003
- Foxwell, H., and Menascé, D., *Web-based Representation and Visualization of Analogies*, Proceedings of the IADIS International Conference, WWW/Internet 2002, Lisbon, Portugal, November 2002
- Foxwell, H., *A Framework for Evaluating Mobile Agent Systems*, JavaOne'99 Software Developers' Conference
- Foxwell, H., and Menascé, D., *Prefetching Results of Web Searches*, CMG 98: Computer Measurement Group's 1998 International Conference, December 1998

Presentations

- Fairfax County Public Schools, Thomas Jefferson High School Science Winter In-Service: *Understanding Data Analysis*, January 2023
- *CDO Challenges: Technical, Legal, and Ethical*, for GMU Executive Development, Mar 2023 & Jan 2022
- *Introduction to Data Science*, to Beijing Information Science & Technology University, for GMU Executive Development, January 2022
- *Dirty Data: Cleaning Up the Mess*, Emerging Technologies for the Enterprise Conference, Philadelphia PA (online), April 2022
- *Data: Its Historical Impact and Implications for the Future*, Jan 2021, to Franklin & Marshall College, <https://vimeo.com/showcase/7189020/video/501253576>
- Baldo, J., Foxwell, H., Rytikova, I., *Developing and Validating Learning Modules for Strengthening MS Graduates' Applied Research Skills*, 2021, <https://journals.gmu.edu/index.php/ITLCP/article/view/3072>
- Baldo, J., Foxwell, H., Rytikova, I., [Next Generation of MS Data Analytic Programs](#), International Big Data & Analytics Education Conference, 2019
- Foxwell, H., Baldo, J., & Rytikova, I. (2019). *Big Data Analytics Curriculum Design, Development, and Delivery*. Presented at the 7th Big Data and Analytics EdCon, College Park Marriott, Adelphi, Maryland, June 3 – 4, 2019

Book Reviews (40+ for ACM Computing Reviews):

- See: http://www.computingreviews.com/browse/browse_reviewers.cfm?reviewer_id=123033
- Most recent review: [*Ethical machines: your concise guide to totally unbiased, transparent, and respectful AI*](#), Blackman R., Harvard Business Review, Cambridge, MA, 2022
- *Review of The Design and Implementation of the FreeBSD Operating System, 2nd Edition*; nominated for ACM 19th Annual Best of Computing Reviews:
<http://www.computingreviews.com/recommend/bestof/bestreviews.cfm?bestYear=2014>

Awards and Nominations:

- George Mason University, Volgenau School of Engineering, *Outstanding Alumnus Award*, 2008
- George Mason University, Computer Science Department, *Outstanding Adjunct Faculty Award*, 2013
- George Mason University, *Nominated 2019 Teaching Excellence Award*
- George Mason University, *Nominated 2021 Online Teaching Excellence Award*
- George Mason University, *Nominated 2023 Online Teaching Excellence Award*

Memberships:

- Association for Computing Machinery (ACM), since 1997
- American Society for Engineering Education (ASEE), since 2017
- American Association for the Advancement of Science (AAAS), since 2020

Training/Certifications:

- [Wiley Certification in Online Instruction](#), 2018
- [AWS Academy Graduate - AWS Academy Cloud Foundations](#), 2022
- [AWS Academy Graduate - AWS Academy Data Analytics](#), 2022

Other Professional Activities:

- Program Committee Co-Chair: *IEEE Big Data 2021 Workshop on Big Data Analytics for COVID-19*, <http://bigdataieee.org/BigData2021/Workshops.html>
- Program Committee member, *IEEE International Conference on Data Science and Systems*, 2017 & 2018
- Organizing Committee Co-Chair: *Oracle/Mason Big Data Symposium*, January 2016, https://cs.gmu.edu/~hfoxwell/Symposium/Symp_bios_abstracts.html
- Program Committee member, *2015 IEEE International Conference on Cloud and Autonomic Computing*, <http://www.autonomic-conference.org/>
- Industry & Government Program Committee member, *IEEE Big Data 2014*, <http://cci.drexel.edu/bigdata/bigdata2014/index.htm>
- Contributing Member, *Data Analytics Engineering Advisory Committee*, Volgenau School of Engineering, George Mason University
- Contributing Member, *Computer Science Industry Advisory Board*, Volgenau School of Engineering, George Mason University
- Contributing Member, *NIST Big Data Working Group*, NIST Cloud Computing Working Group

Military Experience:

- Infantry Platoon Sergeant, US Army, First Infantry Division: 1967-1969, *Viet Nam*. Honorable Discharge, awarded Air Medal, Bronze Star.