CONTACT INFORMATION

University of West Florida
11000 University Parkway, Building 4, Room 233
Pensacola, FL 32514
850-473-7348
dsnider@uwf.edu

Open Researcher and Contributor ID (ORCID): 0000-0002-1496-3583

EDUCATION

Ph.D. Integrated Computing (May 2011)

University of Arkansas at Little Rock, Little Rock, AR Dissertation: "Knowledge Discovery in Fetal Activity Data"

Adviser: Xiaowei Xu, Ph.D.

Concentration: Information Science

M.S. Instrumental Sciences (August 1994)

University of Arkansas at Little Rock, Little Rock, AR

Thesis: "Evaluation of Photodiode Arrays in Rocket Plume Monitoring and Diagnostics"

Adviser: M. Keith Hudson, Ph.D.

Concentration: Spectroscopic Instrumentation

B.A. Physics (May 1992)

Hendrix College, Conway, AR

Adviser: Pradip K. Bandyopadhyay, Ph.D.

TEACHING INTERESTS

Software Development Cybersecurity

Database Systems Business Intelligence Machine Learning
Data Mining

RESEARCH INTERESTS

- Application of knowledge discovery techniques to solve problems involving national security, energy and health
- Information fusion from sensor networks
- Cyber security and information assurance

PROFESSIONAL EXPERIENCE

Assistant Professor, University of West Florida Department of Computer Science, Pensacola, FL, August 2012-Present

- Teaching or have taught Java Programming, C++ Programming, Visual Basic, Data Mining, Data Warehousing, Database Administration, Database Security and Software Engineering Process
- Principal Investigator on the Security and Software Engineering Research Center (S2ERC) research project, "Data Mining for Network Performance Assessment, Phase 2", sponsored by Northrop Grumman Aerospace Systems, January 2015 December 2015, awarded \$26,985.
- Co-Investigator on the Santa Rosa County School District project, "Instructional Evaluation Application", June 2014 August 2016, awarded \$314,306.

- Principal Investigator on the Security and Software Engineering Research Center (S2ERC) research project, "Data Mining for Network Performance Assessment", sponsored by Northrop Grumman Aerospace Systems, January 2014 December 2014, awarded \$26,985.
- Principal Investigator on the Security and Software Engineering Research Center (S2ERC) research project, "A Knowledge Engineering, Team-Based Approach to Introducing Security Assurance Cases", sponsored by Northrop Grumman Aerospace Systems, January – December 2013, awarded \$22,050.
- Mentor for graduate student projects
- Serving on various committees for the Computer Science Department, the College of Science and Engineering, the University, and the community.

Software Development Analyst Level 4, Northrop Grumman Information Systems, Little Rock, AR, January 2008-August 2012

- Lead architect and developer for the creation and implementation of a data warehouse for the Arkansas Department of Human Services containing highly sensitive and confidential data following the Kimball dimensional design methodology
- Developed ETL packages in SQL Server Integration Services to extract source system data from Oracle, SQL Server and SharePoint and then transform and load the data into fact and dimension tables
- Created dimensions and cubes in SQL Server Analysis Services for business intelligence applications
- Designed and developed reports in SQL Server Reporting Services using SQL and MDX that followed guidelines set forth by the United States Department of Health and Human Services for reporting compliance and compiling statistics
- Collaborated with DBA's and Quality Assurance team during the software development lifecycle
- Accountable for customer training, requirements gathering, coordinating testers, project documentation and bi-weekly status reports

Software Developer Level 4, Acxiom Corporation, Little Rock, AR, 1996 -2008

- Lead developer for the creation and implementation of a standardized fulfillment process within DataStage on Acxiom's grid operating system
- Managed software application development projects for Acxiom's Server-Based Fulfillment product
- Responsible for handling opt-outs, credit bureau data, reports, decoy insertion, campaign management files, Oracle SQL statements, and Oracle loads
- Provided Netezza/DataStage ETL consulting and software development for TransUnion, General Motors, State Farm, New York Life, and Nationwide Insurance client account teams
- Lead developer for Customer Fulfillment processes in a large-scale, distributed database in DataStage on AIX for JP Morgan Chase
- Provided on-call support, fulfillment processing consulting and programming for client account teams such as Time-Life, Sprint, AT&T Wireless, and Primedia
- Collaborated with DBA's and system administrators to performance-tune hardware for optimum parallel processing, database, and DataStage flows
- Enhanced Acxiom's existing Linux grid automation services written in Perl with a Visual Basic and PHP user interface
- Assisted with documentation and training
- Served as Oracle database administrator, source code manager, and Linux system administrator for my development team
- Wrote custom DataStage operators to read and load to Netezza
- Used Red Hat Package Manager on Linux to package and deploy software

- Met with customers and project manager to update the project status and to receive the customer's feedback
- Designed web pages in C# and contributed to Java business logic on Linux and AIX
- Developed code to help construct data warehouses for Staples and Global
- Participated in Year 2000 code reviews and code changes

Programmer/Analyst, Euronet (formerly Arkansas Systems, Inc.), Little Rock, AR, 1994 – 1996

- Responsible for the development, delivery and support of client-server Automatic Teller Machine solutions in the United States, Mexico, and Hungary
- Used DB/2 and IBM's Visual Age C/C++ for OS/2, Borland C/C++ for Windows, AS/400 and System 36

PART-TIME EXPERIENCE

Author, Edgewood Solutions, LLC, January 2013 - present

• Writing articles and conducting webinars for the mssqltips.com website about best practices for SQL Server

Adjunct Instructor, ITT Technical Institute, December 2008 – June 2012

- Lecturer in the following courses: Access Control, Authentication, and Public Key Infrastructure; Information Systems Security Capstone Project, Linux Operating System, Linux Server Administration, Computing and Productivity Software; Auditing IT Infrastructure for Compliance
- Advising students, coordinating student assignments and grading quizzes and papers
- Supervising laboratories; assisting and overseeing up to 30 students per session

Adjunct Instructor, University of Arkansas at Little Rock, August – December 2008,

August – December 2007, August – December 2006, January – December 2002

- Instructed in the following subjects: Calculus I, Business Calculus, College Algebra, Elementary Algebra and a General Physics Lab
- Lectured, created student assignments and tests, graded quizzes and exams
- Supervised student assignments, tests and use of Maple software for mathematics

Database Developer, University of Arkansas for Medical Sciences College of Medicine,

- October 2005 April 2006
- Assisted with the implementation of an online metabolomics database for the Department of Geriatrics in conjunction with the MidSouth Bioinformatics Center
- Utilized Linux, Apache, MySQL and Perl

Adjunct Instructor, University of Central Arkansas, January 2003 – May 2006

- Taught Intermediate Algebra courses
- Lectured and created student assignments and tests
- Graded quizzes and exams

PUBLICATIONS

- Norman McFadden, Bryan Daniel, Robert Hoyt, **Dallas Snider**, "Development of a Web-Based Registry to Support Diabetes in Free Medical Clinics," *Journal of Diabetes Science and Technology*, Winter 2017, (accepted for publication).
- G. Merrill Rice, **Dallas Snider**, Jeffery L. Moore, J. Timothy Lavan, Rich Folga, Thomas B. VanBrunt, "Evidence for –Gz Adaptation Observed with Wearable Biosensors during High Performance Jet Flight," *Aerospace Medicine and Human Performance*, vol. 87, no. 12, December 2016 (accepted for publication).
- Robert Hoyt, Dallas Snider, Carla Thompson, "IBM Watson Analytics: Automating Descriptive and Predictive Statistics," *Journal of Medical Internet Research Public Health and Surveillance*, (accepted for publication).
- Glenda Mayo and **Dallas Snider**, "Building Automation Systems and Cyber Security: A Multiple Discipline Perspective," *Proceedings of the 2016 International Annual Conference of the American Society for Engineering Management*, October 2016 (accepted for publication).
- Mike Ford, Cody Mallery, Frank Palmasani, Michael Rabb, Reid Turner, Lem Soles and Dallas Snider, "A Process to Transfer Fail2ban Data to an Adaptive Enterprise Intrusion Detection and Prevention System," *Proceedings of the 2016 IEEE SoutheastCon*, March 31-April 3, 2016, Norfolk, VA.
- Lem Soles, Thomas Reichherzer and **Dallas Snider** "A Tool Set for Managing Virtual Network Configurations," *Proceedings of the 2016 IEEE SoutheastCon*, March 31-April 3, 2016, Norfolk, VA.
- G.M. Rice, T.B. VanBrunt, **D.H. Snider**, R.E. Hoyt, "Wearable Accelerometers in High Performance Jet Aircraft", *Aerospace Medicine and Human Performance*, vol. 87, no. 2, 2016, pp. 102-107.
- Thomas Cole Amick, Lem R. Soles, **Dallas H. Snider**, "Moving Towards an Adaptive Enterprise Intrusion Detection and Prevention System," *Proceedings of the 2015 International Conference on Artificial Intelligence (ICAI'15)*, July 27-30, 2015, Las Vegas, NV.
- Lem R. Soles, Thomas Reichherzer, **Dallas Snider**, "Creating a Cost Effective Air to Ground Network Simulation Environment," *Proceedings of the 2015 IEEE SoutheastCon*, April 9-12, 2015, Fort Lauderdale, FL.
- **Dallas Snider**, Glenda Mayo, Sridhar Natarajan, "Similarity Measures in Smart Building Electrical Demand Data," *Proceedings of the 2015 IEEE SoutheastCon*, April 9-12, 2015, Fort Lauderdale, FL.
- Sarah Pramanik and **Dallas Snider**, "Defining Threats Across Organizational Boundaries," *Proceedings of the 11th International Conference and Expo on Emerging Technologies for a Smarter World (CEWIT 2014)*, October 29-30, 2014, Melville, NY.
- **D. Snider**, J. Coffey, T. Reichherzer, N. Wilde, C. Terry, J. Vandeville, A. Heinen and S. Pramanik, "Using Concept Maps to Introduce Software Security Assurance Cases," *CrossTalk: The Journal of Defense Software Engineering*, vol. 27, no. 5, September 2014.
- John Coffey, **Dallas Snider**, Thomas Reichherzer, Norman Wilde, "Concept Mapping for the Efficient Generation and Communication of Security Assurance Cases", *Fifth International Multi-Conference on Complexity, Informatics and Cybernetics (IMCIC 2014)*, March 4-7, 2014, Orlando, FL.
- George Goehring, Thomas Reichherzer, Eman El-Sheikh, Dallas Snider, Norman Wilde, Sikha Bagui, John Coffey, Laura J. White, "A Knowledge-Based System Approach for Extracting Abstractions from Service Oriented Architecture Artifacts". (IJARAI) International Journal of Advanced Research in Artificial Intelligence, Vol. 2, No.3, 2013, pp. 44-52.
- **D. H. Snider**, R. B. Shanks, R. Cole and M. K. Hudson, "Inexpensive Photodiode Arrays for Use in Rocket Plume and Hot Source Monitoring and Diagnostics," *Meas. Sci. Technol.*, 14 (2003) 1725-1733.

- M. K. Hudson, R. B. Shanks, D. H. Snider and D. M. Lindquist, C. Luchini, and S. Rooke, "UV, Visible, and Infrared Spectral Emissions in Hybrid Rocket Plumes," *International Journal of Turbo and Jet Engines*, 15, 71-87 (1998).
- M. K. Hudson, R. B. Shanks, **D. H. Snider** and D. M. Lindquist, "Spectroscopic Survey of Hybrid Plume Emissions," *AIAA Technical Paper No. 94-3015*, July 27-29, 1994.
- **D. H. Snider** and M. K. Hudson, "Evaluation of Photodiode Arrays in Rocket Plume Monitoring and Diagnostics," *Proc. Ark. Acad. Sci.*, 1994, 48, 174-180.

BOOKS

• **D. H. Snider**, Creating Reports with SQL Server 2012 Reporting Services, Packt Publishing, ISBN 978-1-78217-718-0, November 2013.

BOOK CHAPTERS

John W. Coffey, Arthur Baskin and Dallas Snider, "Knowledge Elicitation and Conceptual Modeling
to Foster Security and Trust in SOA System Evolution", in *Emerging Trends in The Evolution of*Service-Oriented and Enterprise Architectures, accepted for publication September 2016.

GRANTS

- Principal Investigator on the Security and Software Engineering Research Center (S²ERC) research project, "Data Mining for Network Performance Assessment, Phase 2", sponsored by Northrop Grumman Aerospace Systems, Co-PIs: Thomas Reichherzer and Norman Wilde, January 2015– December 2015, awarded \$26,985.
- Principal Investigator on the Security and Software Engineering Research Center (S²ERC) research project, "Data Mining for Network Performance Assessment", sponsored by Northrop Grumman Aerospace Systems, Co-PIs: Thomas Reichherzer and Norman Wilde, January 2014–December 2014, awarded \$26,985.
- Principal Investigator on the Security and Software Engineering Research Center (S²ERC) research
 project, "A Knowledge Engineering, Team-Based Approach to Introducing Security Assurance
 Cases", sponsored by Northrop Grumman Aerospace Systems, Co-PIs: John Coffey, Eman ElSheikh, Bilal Gonen, Thomas Reichherzer, Laura White and Norman Wilde, January–December
 2013, awarded \$22,050.

PRESENTATIONS

- G.M. Rice, T. VanBrunt, **D.H. Snider**, R.E. Hoyt, "Physiologic Responses Obtained From Wearable Biosensors During High Performance Jet Aircraft Maneuvers," Aerospace Medical Association's 87th Annual Scientific Meeting, April 24-28, 2016, Atlantic City, NJ. Abstract appears in *Aerospace Medicine and Human Performance*, vol. 87, no. 3, March 2016, p. 283.
- G.M. Rice, T. VanBrunt, **D.H. Snider**, R.E. Hoyt, "A New Golden Age? Validation of Wearable Accelerometers in High Performance Jet Aircraft," 86th Annual Meeting of the Aerospace Medical Association, May 10-14, 2015, Lake Buena Vista, FL. Abstract appears *in Aerospace Medicine and Human Performance*, vol. 86, no. 3, March 2015, p. 307.
- G.M. Rice, T. VanBrunt, **D.H. Snider**, R.E. Hoyt, "Physiologic Responses Recorded By Wearable Bio-Sensors During 'In-Flight' High Performance Aircraft Maneuvers," 86th Annual Meeting of the Aerospace Medical Association, May 10-14, 2015, Lake Buena Vista, FL. Abstract appears in *Aerospace Medicine and Human Performance*, vol. 86, no. 3, March 2015, p. 307.

- **D. H. Snider**, "Communicating Security Procedures, Threats and Mitigation Strategies," ITEN Wired 2014 Summit, October 2-3, 2014, Pensacola Beach, Florida
- **D. H. Snider**, "The Internet of Things," ITEN Wired 2013 Summit, September 2013, Pensacola Beach, FL.
- **D. H. Snider**, "Improving Decision Support Capabilities in Government Operations," 2012 Northrop Grumman Software Engineering Symposium, March 2012.
- **D. H. Snider**, X. Xu and R. B. Govindan, "Mining Placental Deficiencies in Fetal Magnetocardiogram Data," 2010 MidSouth Computational Biology and Bioinformatics Society Annual Conference, February 2010.
- **D. H. Snider**, X Xu and R. B. Govindan, "Knowledge Discovery within Fetal Activity Data," Arkansas Academy of Science Annual Meeting, April 2008.

POSTER PRESENTATIONS

- Mike Ford, Cody Mallery, Frank Palmasani, Michael Rabb, Reid Turner, Lem Soles and Dallas Snider, "A Process to Transfer Fail2ban Data to an Adaptive Enterprise Intrusion Detection and Prevention System," 2016 UWF Student Scholar Symposium and Faculty Research Showcase, April 21, 2016, Pensacola, FL.
- Lem Soles, Thomas Reichherzer and **Dallas Snider**, "A Tool Set for Managing Virtual Network Configurations," 2016 UWF Student Scholar Symposium and Faculty Research Showcase, April 21, 2016, Pensacola, FL.
- Lauren Amick, Ramar Baker, Teresa Jouben, Alia Layne, Skye Li, Hi Tran, **Dallas Snider**, "Professional Educators Assessment and Results System (PEARS)", 2016 UWF Student Scholar Symposium and Faculty Research Showcase, April 21, 2016, Pensacola, FL.
- **D. Snider**, C. Carnley, D. Dawson, P. Northrup, P. Obray, L. West, "Professional Educators Assessment and Results System (PEARS)", Future of Education Technology Conference, January 15, 2016, Orlando, FL.
- L. Soles, T. Reichherzer, **D. Snider**, "Creating a Cost Effective Air to Ground Network Simulation Environment," 2015 Student Scholar Symposium and Faculty Research Showcase, April 23, 2015, Pensacola, FL.
- **D. H. Snider**, G. Mayo, S. Natarajan, "Similarity Measures in Smart Building Electrical Demand Data," 2015 Student Scholar Symposium and Faculty Research Showcase, April 23, 2015, Pensacola, FL.
- **D. H. Snider**, T. Reichherzer, N. Wilde, "Data Mining for Network Performance Assessment," 2014 UWF Faculty Showcase, April 2014, Pensacola, FL.
- **D. H. Snider**, "Addressing Big Data Challenges and Opportunities within Florida's Electrical Energy Sector", 2013 Florida Energy Summit, October 14-15, 2013, Orlando, Florida.
- **D. H. Snider** and X. Xu, "Mining Fetal Magnetocardiogram Data for High-Risk Fetuses," 2011 IEEE International Conference on Bioinformatics and Biomedicine, November 2011.
- **D. H. Snider**, R. B. Govindan, X. Xu, H. Preissl, H. Eswaran and C. Lowery, "Signatures of High-Risk Condition in Fetal Cardiogram," 2009 Society for Gynecologic Investigation Annual Scientific Meeting, March 2009.

AREAS OF TECHNICAL EXPERTISE

- Software Development: C/C++, Oracle PL/SQL, MDX, Oracle ProC, Perl, PHP, IBM Mainframe Assembler, Java and UNIX/AIX/Linux/Orchestrate Shell Scripting
- Databases: SQL Server 2016 and Azure, Oracle 8.0/8i/9i/10g/11g, Netezza, DB/2 and MySQL
- Operating Systems: Red Hat Enterprise Linux, Fedora, Ubuntu, Tru64 UNIX, AIX, Solaris, Windows NT to Windows 8.1, Hadoop Distributed File System, and IBM MVS

- Database Design: SQL Server Management Studio and Sybase PowerDesigner Data Architect
- ETL Tools: SQL Server 2016 Integration Services and IBM DataStage 7.01r1 7.51a
- Information Visualization: SQL Server 2016 Reporting Services, PerformancePoint, SharePoint
- Data Analysis: MATLAB, SQL Server 2016 Analysis Services, IBM Watson Analytics
- Machine Learning: WEKA, libSVM, See5, C Clustering Library, RapidMiner
- Change Management and Deployment: RedGate, Red Hat Package Manager, Visual Source Safe, PVCS, Subversion and InstallShield
- Integrated Development Environments: MS-Visual Studio, jGRASP and Eclipse
- Microsoft Office Suite Products: Visio, Project, Word, Excel, Outlook, PowerPoint, Performance Point and Share Point
- Online Teaching: Camtasia Studio, Blackboard Collaborate, Desire2Learn

HONORS AND AWARDS

- Northrop Grumman Arkansas DHS Project Employee of the Month in 2009
- Monetary awards from Acxiom for outstanding performance in 2005, 2006, and 2007
- Acxiom Client Gold Award in 2006
- Acxiom Client Silver Award in 2007
- Acxiom Market Management Applications Associate of the Quarter in 2003
- Acxiom Direct Media Business Unit Associate of the Month in 1998
- Best Student Presentation, Arkansas Academy of Science Annual Meeting, 1994
- Robert Byrd Honors Scholarship, 1988
- Arkansas Governor's Scholarship, 1988

MEMBERSHIPS

- Senior Member, Institute of Electrical and Electronics Engineers (IEEE) Computer Society
- Association for Computing Machinery (ACM)
- Oracle Technology Network
- Microsoft Developer Network