

Research Expertise

Integration of large data sets for mobile robotic systems, business analytics and the integration of business and engineering analytics into entrepreneurial business analysis to create strategic solutions.

Education

MBA with minor in Finance, Texas A&M Commerce, Fall 2018

MIT Executive Certificates in Strategy and Innovation 2012

Management and Leadership 2013

Ph.D. in Computer Engineering, University of Central Florida - 1997

Dissertation Title: Automated performance monitoring and evaluation in training systems

M.S.E. in Computer Engineering, University of Central Florida – 1991,

Thesis Title: real-time computer-generated cockpit instrumentation

B.S.E in Computer Engineering – 1988, University of Central Florida

Adjunct Professor, The University of Central Florida,

1994-2004

College of Engineering, Orlando, Florida.

Academic Appointments

Adjunct Professor, Sonoma State University. ,

2020-Present

College of Business,

Adjunct Professor, Texas A&M Commerce. ,

2019-Present

College of Business, Department of Marketing / Analytics.

Adjunct Professor, The University of Central Florida,

1994-2004

College of Engineering, Orlando, Florida.

Research Sponsor, Delhi Technical University, Delhi India

2009-2013

College of Engineering autonomous systems and program management

Industry Experience

SAIC –

2023 - Current

- Business Case analysis for new investments
- M&S / Autonomous System / AI Subject Matter Expert

Amazon Web Services –

2022 - 2023

- Technical Business Development in cloud-based approaches in sustainment, business and simulations

Lockheed Martin Corporation –	2007 - 2022
<ul style="list-style-type: none">• Research in New business opportunities (Business Analysis)• Business Analytics and methodologies for new business ventures.• Business Innovation techniques and applications.• Big Data for Sustainment and Augmented Reality using Gaming Techniques• Internal Business and Engineering research > \$30M	
Science Applications corporation and other various defense contractors. –	2000-2007
<ul style="list-style-type: none">• Intelligent Agent Research• DARPA Grand Challenge Mission Planning• Incorporation of unmanned Systems into Big Data concepts• Applications of artificial intelligent techniques for training and autonomy• Led Intelligent Agent Research• Internal Research > \$5M	
Silicon Graphics Incorporated –	1995-2000
<ul style="list-style-type: none">• Artificial Intelligence Techniques• High Performance Computing• Big Data in financial, medical and web applications• Virtual Reality Applications	
Walt Disney World	1987-2000
<ul style="list-style-type: none">• Management and performance analytics in attractions.	
University of Central Florida	1983-1988
<ul style="list-style-type: none">• Programming for course scheduling• General Support	
Drewes Consulting	1979-1983
<ul style="list-style-type: none">• Educational Programming applications	

Publications

Citations:30 h-index:4

Peer-Reviewed Journal Publications

- Zhang, J., Drewes, P., et al (2023)**, “Constructive Simulation Limitations and Cloud Scalability”, Inter Service Industry Training and Simulation (I/ITSEC) Conference, December 2023
- Drewes, P., Jameson, S., (2009)**, "Unmanned Surface Systems Collaborative Experimentation," in the Proceedings of the IEEE International Conference on Robotics and Automation, Kobe, Japan, May 12-17, 2009
- Drewes, P., Jameson, S., Zaychik, V., (2009)**, "Collaborative Command and Control of Unmanned Surface Operations," in the Proceedings of the IEEE International Conference on Robotics and Automation, Kobe, Japan, May 12-17, 2009
- Satterfield, B., Drewes, P., Choxi, H., 2008.** "Sensor Technology and UGV Operations, Lesson's Learned from the DARPA Urban Challenge," in the Proceedings of the Association for Unmanned Vehicle Systems International (AUVSI) Unmanned Systems North America, June 10-12, 2008, San Diego, CA.
- Drewes, P., (2008)**, Journal of Aerospace Computing Information and Communication,

Advancing Robotics: The Urban Challenge Effect, Special Issue on Urban Challenge,
Vol. 5, no. 12, pp 530-542

Drewes, P., Gonzalez, A. J., Gerber, W. (2000), , Interpreting Trainee Intent in Real Time in a Simulation-based Training System. Transactions of the Society for Computer Simulation, **17**(3), 120–134

Drewes, P., (1995), Proceedings of the IEEE International Conference on Systems, Man and Cybernetics, 1995, Automatic performance monitoring and Evaluation

Peer-Reviewed Conference Publications

Drewes, P., Franke, J (2008), "Collaborative Unmanned Operations for Maritime Security," in the Proceedings of the Third Annual Maritime Systems and Technology Global Conference, Cadiz, Spain, November 12-14, 2008.

Drewes, P., Kalphat, M. (2006), *Embedded Multi-Modal Unmanned System Training* Inter-service Industry for Training Simulation and Education Conference

Drewes, P., Littlejohn, T., (2005), *Transforming Geospatial Data into Collective Team Knowledge*, Global Data Interoperability – Challenges and Techniques, IEEE Mass Storage Systems & Technology Committee, Sardinia, Italy,

Drewes, P., Kalphat, M. (2005), *Live, Virtual and Constructive training for unmanned systems*, Inter-service Industry for Training Simulation and Education Conference,

Drewes, P., (2004), *Live, Virtual, and Constructive Combined Operations - A Study in Unmanned Systems*, Inter-service Industry for Training Simulation and Education Conference

Drewes, P., (2002), *Semi-Autonomous Forces Involving Robotic Entities Research Results*, Inter-service Industry for Training Simulation and Education Conference, Orlando Florida,

Drewes, P., (2001), *Experimentation in Group Robotics Behaviors*, Inter-service Industry for Training Simulation and Education Conference, Orlando Florida,

Conference and Workshops Presentations without Proceedings (Lightly Reviewed)

Drewes, P., (2021), "Digital Twin and Sustainment – Applications of AI/ML", Digital Connected World Conference, June 2021

Book Contribution - Marketing Analytics, McGraw-Hill publication, December 2020

Brodnax, J., Drewes, P., (2019) "Developing a business analytics curriculum for all undergraduate business students", Southwest Academy of Management, March 2020

Drewes, P., (2019) "Innovation in industry / academia analytics", Association to Advance Collegiate Schools of Business analytics conference, May 2019

Drewes, P., (2009), "Collaborative Unmanned Operations," 1st International Conference on Autonomous Unmanned Vehicles, Bangalore, India, April 3-4, 2009.

Drewes, P., (2009), "Increasing Situational Awareness Through the Use of UXV Teams While Reducing Operator Work Load," Association for Unmanned Vehicle Systems International, Washington, DC, August 10-13, 2009.

Drewes, P., (2006), *Embedded Multi-Modal Unmanned System Training*, Association for Unmanned Systems Vehicle International

Dr. Peter Drewes
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407-325-0537

- Drewes, P.**, (2006), *Live Virtual and Constructive Training for Unmanned System Usage*, Florida Conference on Recent Advances in Robotics
- Drewes, P.**, (2005), *Tactical Behaviors and Unmanned Ground Vehicles*, Association for Unmanned Systems Vehicle International
- Drewes, P.**, (2005), *A Study in Unmanned Systems Training Through Live Virtual and Constructive Simulation*, International Conference on Education and Information Systems, Technologies and Applications
- Drewes, P.**, (2004), *UGV Mission Planning – A Lesson's Learned from the DARPA Grand Challenge*, Association for Unmanned Systems Vehicle International
- Drewes, P.**, (2003), *Demonstration of a Systems Architecture for Live, Virtual, and Constructive Interoperation*, Spring Interoperability Workshop - Simulation Interoperability Standards Organization
- Drewes, P.**, (2003), *Demonstration of a Systems Architecture for live, virtual and constructive UGV operation*, Association for Unmanned Systems Vehicle international,
- Drewes, P.**, (2002), *Lessons Learned in Group Robotic Command and Control*, Association for Unmanned Systems Vehicle International
- Drewes, P.**, (2001), *Unified Entity Maneuver and Human Performance Modeling*, Simulation Interoperability Conference

Grants and Contracts

Principal Investigator , "ASVC", Office of Naval Research /Association for Unmanned Vehicle Systems International Autonomous Surface Vehicle Competition, 2007	\$50,000
Principal Investigator , "LANDROIDS", Defense Advanced Research Projects Agency, Sponsored Research Autonomous systems	2002-2005 \$1M
Key Personnel , Autonomous systems, Defense Advanced Research Projects Agency, Sponsored Research in Autonomous Systems	2003-2005 \$1M
Key Personnel , "Software for Distributed Robotics", Defense Advanced Research Projects Agency, Sponsored Research in autonomous systems	2002-2004 \$1M
Principal Investigator , "Manned Unmanned Teaming", Research and Development Command, Sponsored Research in Live Virtual and Constructive Training Systems	2001-2005 \$2M
Principal Investigator , "Intelligent Agents", Research and Development Command. Sponsored Research in non-mobile agents	2000-2001 \$500k

Teaching

Wine Analytics – Integration of databases, visualization for value creation Sonoma State 2021-Present

Wine Visual Analytics – Integration of Tableau, Excel for advanced visualization Sonoma State 2021-Present

Digital Analytics and the Direct to Consumer Wine Analytics. Sonoma State Webinar, March 2021

Digital Analytics and the 3-Tier Wine Analytics - Sonoma State Webinar, January 2021

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Data & Information Management – Hybrid lectures in database organization, installation, optimization and programming (MySQL, Python) 2019-Present
Texas A&M Commerce

Business Process Management and ERP Systems. Hybrid lecture in structuring and optimization of business processes 2020
Texas A&M Commerce

Business Concepts and Tools – Generated New Material Syllabus for new introduction to business for non-business majors. 2019
Texas A&M Commerce

System Engineering – Full lifecycle analysis including group projects and presentations. This senior level undergraduate course covered necessary steps for successful entry into the job market. Approximately 30 students per semester. 1994-2004
University of Central Florida

High Performance Computing – Analysis of computer architectures, their advantages and methods for computing big data, graphics and busses for future implementation. Graduate course, approximately 40 students, video / online course. 1998-2000
University of Central Florida

Introduction to Programming – Embedded low-level programming course for sophomore / junior level students to understand computer architecture and logical reasoning to determine tasks. Approximately 30 students per semester. 2000-2002
University of Central Florida

Project Lifecycle / Program Management – Instruction for Delhi Technical University students to understand the entire project lifecycles, budgets, marketing and business around sponsored UAV research. Approximately 20 students per semester. 2009-2013
Delhi Technical University
New Delhi