

Warren E. Dixon

Mechanical and Aerospace Engineering Department
University of Florida
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Formal Education

<i>Clemson University</i>	Ph.D. in Electrical Engineering (EE) – August 2000
<i>University of South Carolina</i>	Master of Engineering (EE) – May 1997
<i>Clemson University</i>	Bachelors of Science (EE) – December 1994

Professional Experience

- Herbert Wertheim College of Engineering – University of Florida, Gainesville, FL: *Interim Dean* (2025 – present).
- Department of Mechanical and Aerospace Engineering – University of Florida, Gainesville, FL: *Distinguished Professor* (2024 – present).
- Department of Mechanical and Aerospace Engineering – University of Florida, Gainesville, FL: *Department Chair* (01/01/2021 – 2025).
- Department of Mechanical and Aerospace Engineering – University of Florida, Gainesville, FL: *Professor* (2012 – 2024).
- Department of Mechanical and Aerospace Engineering – University of Florida, Gainesville, FL: *Associate Professor* (2008 – 2012).
- Department of Mechanical and Aerospace Engineering – University of Florida, Gainesville, FL: *Assistant Professor* (May 2004 – July 2008).
- Robotics and Energetic Machines Group – *ORNL*, Oak Ridge, TN: Eugene P. Wigner Fellow (October 2000 – October 2002) and Staff Scientist (October 2000 – May 2004).

Professional Service

Society Governance

- Elected Member, IEEE Control Systems Society (CSS) Nominating Committee (2019-2020)
- Elected Member, IEEE CSS Board of Governors (BOG) (2017-2019)
- Director of Operations, IEEE CSS Executive Committee of the BOG (2011-2015)
- Member, IEEE CSS Long Range Planning Committee (2014-2015, 2022-present)
- IEEE CSS Representative, IEEE-USA Committee on Intellectual Property (2015-2018)
- Appointed Member, IEEE CSS BOG (2008)

External Advisory Functions

- Member, Science Advisory Council, Institute for Human & Machine Cognition (IHMC) (2025-present)
- External Reviewer, University of Miami – Mechanical Engineering Program (2023)
- External Reviewer, Embry-Riddle Aeronautical University - Engineering Physics Ph.D. Program (2020)
- Member, U.S. Air Force Scientific Advisory Board (2013-2016)
 - Chair, Science and Technology Review Committee for the Air Force Office of Scientific Research (2016)
 - Chair, Science and Technology Review Committee for the Air Force Space Vehicles Directorate (2014)

- Member, Defense of USAF Forward Operating Bases Study (2014)
- Member, Micro-Satellite Mission Applications Study (2013)
- Member, Defense Science Study Group, Institute for Defense Analysis (2009-2010)

Editorial Service

- Associate Editor, *American Control Conference* (Invited Papers) (2024-2025)
- Associate Editor, *IEEE Control Systems Magazine* (2016-2022)
- Guest Editor, Special Issue on Assistive and Rehabilitation Robotics, *IEEE Control Systems Magazine*, (2018)
- Guest Editor, Special Issue on Extensions of Reinforcement Learning and Adaptive Control, Vol.1, Nos. 3&4, 2014, *IEEE/CAA Journal of Automatica Sinica*
- Associate Editor, *ASME Journal of Dynamic Systems, Measurement and Control* (2010-2013)
- Associate Editor, *Automatica* (2009-2024)
- Associate Editor, *International Journal of Robust and Nonlinear Control* (2009-2017)
- Associate Editor, *IEEE Transactions on Systems Man and Cybernetics: Part B – Cybernetics* (2004-2012)
- Associate Editor, *Journal of Robotics* (2008-2011)
- Associate Editor, IEEE CSS Conference Editorial Board (CEB) (2008-2012)
- Associate Editor, ASME Dynamic Systems Control Division (DSCD) CEB (2008-2010)
- Associate Editor, IEEE Robotics and Automation Society (RAS) CEB (2007-2010)

Technical Committees

- Chair, IEEE CSS Technical Committee on Intelligent Control (2016-2020)
- Member, IEEE Computational Intelligence Technical Committee on Adaptive Dynamic Programming and Reinforcement Learning (2013-present)
- Member, IEEE CSS Technical Committee on Intelligent Control (2006-present)
- Member, IEEE CSS Technical Committee on Nonlinear Systems and Control (2006-present)
- Member, ASME Dynamic Systems Control Division (DSCD) Mechatronics Technical Committee (2006-present)
- Member, ASME DSCD Robotics Technical Committee (RTC) (2008-present)
 - Chair, (2011-2012)
 - Co-Chair, (2010-2011)
- Chair, ASME DSCD ACC Conference Committee for the RTC (2008)

Workshop/Invited Session/Tutorial Session/Symposium Organizer:

- Co-Organizer and Lecturer, One Day Workshop: *Verifiable Adaptive Control Systems and Learning Algorithms*, IEEE Conference on Decision and Control (CDC), Nice, FR (December 2019)
- Lecturer, One Day Workshop: *Parameter Convergence in Adaptive Control without Persistence of Excitation*, IEEE Conference on Decision and Control (CDC), Miami, FL (December 2018)
- Co-Organizer: *Analysis, Design, and Control of Systems in Neuroscience I*, American Control Conference (June 2019)
- Co-Organizer: *Analysis, Design, and Control of Systems in Neuroscience II*, American Control Conference (June 2019)
- Lecturer, Tutorial Session: *Autonomy and Machine Intelligence in Complex Systems*, American Control Conference (June 2015)

- Co-Organizer and Lecturer, One Day Workshop: *Intelligent Planning and Control: Bringing Together Adaptive Control and Reinforcement Learning for Guaranteeing Optimal Performance and Robustness*, IEEE Conference on Decision and Control (CDC), Florence, IT (December 2013)
- Co-Organizer and Lecturer, Mini-symposium: *Time Delay Systems with Applications*, SIAM Conference on Control and its Applications, San Diego, CA (July 2013)
- Co-Organizer and Lecturer, Tutorial Session: *Implicit Learning Control Through a RISE Architecture: Theory and Applications*, IEEE International Symposium on Intelligent Control (ISIC), part of the Multi-conference on Systems and Control (MSC), Yokohama, Japan (September 2010)
- Organizer and Lecturer, Invited Session: *Current Topics Vision-Based Control*, IEEE International Symposium on Intelligent Control (ISIC), part of the Multi-conference on Systems and Control (MSC), San Antonio, TX (September 2008)
- Organizer and Lecturer, One Day Workshop: *Non-Model Based Intelligent Control of Engineering Systems*, IEEE Conference on Decision and Control (CDC), New Orleans, LA (December 2007)

Awards

Individual

- AIAA Senior Member (2025)
- Distinguished Professor (2024-present)
- Dean's Leadership Professorship (2021-present)
- Tau Beta Pi (2023-present)
- AAIA (Asia-Pacific Artificial Intelligence Association) Fellow (2023)
- IFAC Cyber Physical Human Systems 2020 Best Paper Award (2020)
- Distinguished Member, IEEE Control Systems Society (2020)
- IEEE Control Systems Technology Award (2019)
- UF Preeminence Professorship (2017-2019)
- College of Engineering Doctoral Dissertation Mentoring Award, University of Florida (2017-2018 & 2012-2013)
- Air Force Commander's Public Service Award (2016)
- ASME Fellow (2016)
- IEEE Fellow (2016)
- Newton C. Ebaugh Professor (2015-2021)
- American Automatic Control Council 2015 O. Hugo Schuck Award for best overall application paper (out of 931 total published papers) from the 2014 American Control Conference
- University of Florida Entrepreneurship Faculty Fellow (2014-present)
- Fred Ellersick Award for Best Overall Paper in the Unclassified Technical Program of the 2013 Military Communications (MILCOM) Conference, for "Graph Matching-Based Topology Reconfiguration Algorithm for Systems of Networked Autonomous Vehicles," along with L. Navaravong, J. Shea, and E. Pasilliao (2014)
- IEEE Control Systems Society Distinguished Lecturer (2013-2018)
- University of Florida Research Foundation Professorship (2012-2014)
- Charles Taylor Faculty Fellow, Department of Mechanical and Aerospace Engineering (2012-2015)
- ASME Dynamics Systems and Control Division Outstanding Young Investigator Award (2011)

- Department of Mechanical and Aerospace Engineering Young Investigator Award (2010)
- Selected member of the Defense Science Study Group for the Institute for Defense Analysis with the primary function to assist the Office of the Secretary of Defense (OSD), the Joint Staff, the Unified and Specified Commands, Defense Agencies, and certain other Federal Government Agencies in addressing important and enduring issues (2010-2011)
- IEEE Systems, Man, and Cybernetics (SMC) Best Associate Editor Award (2009)
- American Automatic Control Council 2009 O. Hugo Schuck Award for best overall application paper from (879 total published papers) the 2008 American Control Conference
- IEEE Robotics and Automation Society (RAS) Early Academic Career Award (2006)
- NSF CAREER Award (2006)
- Elected Senior Member of IEEE (2005)
- U. S. Department of Energy Outstanding Mentor Award (2004)
- ORNL Early Career Award for Engineering Accomplishment for “innovative advancements of nonlinear Lyapunov-based control of engineering systems and exceptional early career achievements in robotics research and engineering,” (2001)
- Sigma Xi, The Scientific Research Society (2001 – present)
- ORNL Eugene P. Wigner Fellowship, (2000 – 2002)

Student Awards (excludes fellowships such as NSF, NDSEG, NRC, etc)

- K. Stubbs, Association for Academic Women’s (AAW) Emerging Scholar Honorable Mention Award (2022)
- M. Greene, Attributes of a Gator Engineer Award in Professional Excellence (2021 - 2022)
- V. Duenas, R. Downey, Vodovnik Best Student Paper Award Winner (3rd Place), *International Functional Electrical Stimulation Society (IFESS)* meeting (2016)
- S. Obuz, Best Student Paper Award for “Unknown Time-Varying Input Delay Compensation for Neuromuscular Electrical Stimulation”, *IEEE Multi-Conference on Systems and Controls* (2015)
- R. Downey, Vodovnik Best Student Paper Award Finalist, *International Functional Electrical Stimulation Society (IFESS)* meeting (2012)
- N. Fischer, Gator Engineering Attribute in Professional Excellence (2012)
- Best Dissertation Award, University of Florida, Mechanical and Aerospace Engineering Department:
 - C. Makumi (2025), E. Griffis (2024), M. Green (2023), B. Allen (2022), C. Rouse (2020), C. Cousin (2019), V. Duenas (2018), A. Parikh (2017), R. Downey (2016), R. Kamalapurkar (2015), N. Fischer (2013), A. Dani (2012), N. Sharma (2011), P. Patre (2010)
- Graduate Student Research Award
 - C. Nino (2025), O. Patil (2023), P. Deptula (2019), C. Cousin (2018), I. Chakraborty (2017), A. Parikh (2016), R. Kamalapurkar (2014), N. Fischer (2012), S. Bhasin (2011)
- N. Sharma, *ASME Dynamic Systems and Control Conference*, Best Robotics Student Paper for “Nonlinear Control of NMES: Incorporating Fatigue and Calcium Dynamics”, 2009
- P. Patre, Outstanding Academic Achievement Award for the University of Florida College of Engineering, 2008
- N. Sharma, Finalist (one of four) for Best Student Paper Award for “Modified Neural Network-based Electrical Stimulation for Human Limb Tracking”, *IEEE Multi-Conference on Systems and Controls*, 2008

Students:

Committee Chair (Advisor) Ph.D. Students

1. Keith Currier (2024-present), University of Florida, Gainesville, FL
2. Max Gardenswartz (2024-present), University of Florida, Gainesville, FL
3. Brandon Fallin (2023-present), University of Florida, Gainesville, FL
4. Wenyu Wu (2023-present), University of Florida, Gainesville, FL
5. Xuehui Shen (2023-present), University of Florida, Gainesville, FL
6. Saiedeh Akbari (2023-present), University of Florida, Gainesville, FL
7. Jhyv Philor (2022-present), University of Florida, Gainesville, FL
8. Rebecca Hart (2022-present), University of Florida, Gainesville, FL
9. Cristian Nino (2021-2025), University of Florida, Gainesville, FL
10. Patrick Amy (2020-2025), Naval Surface Warfare Center, Panama City, FL
11. Kimberly Stubbs (2019-2025), Assistant Instructional Professor, Department of Engineering Education, University of Florida, Gainesville, FL
12. Hannah Sweatland (2020-2024), Staff Researcher, Johns Hopkins Applied Physics Laboratory, Laurel, MD
13. Emily Griffis (2020-2024), Senior Engineer, Systems Engineering, Raytheon, Tucson, AZ
14. Ciku Makumi (2020-2024), Research Aerospace Engineer, Eglin Air Force Base, Fort Walton Beach, FL
15. Sage Edwards (2019-2024), Research Aerospace Engineer, Eglin Air Force Base, Fort Walton Beach, FL
16. Omkar Patil (2019-2023), Postdoctoral Researcher, University of Florida, Gainesville FL
17. Axton Isaly (2019-2023), National Research Council Postdoctoral Associate, Eglin Air Force Base, Fort Walton Beach, FL
18. Duc (Daniel) Le (2017-2022), Aerospace Controls Research Engineer, Aurora Flight Sciences, Boston MA
19. Max Greene (2018-2022), Aerospace Controls Research Engineer, Aurora Flight Sciences, Boston MA
20. Runhan Sun (2017-2022), Senior Software Engineer, Mathworks, Natick, MA
21. Brendon Allen (2018-2021), Assistant Professor, Department of Mechanical Engineering, Auburn University, Auburn, AL
22. Federico Zegers (2017-2021), Staff Researcher, Johns Hopkins Applied Physics Laboratory, MD
23. Zachary Bell (2015-2019), Staff Researcher, Eglin Air Force Base, Fort Walton Beach, FL
24. Patryk Deptula (2015-2019), Senior Robotics Researcher, Charles Stark Draper Laboratory, Cambridge, MA
25. Courtney Rouse (2015-2019), Research Engineer, Southwest Research Institute, San Antonio, TX
26. Christian Cousin (2015-2019), Assistant Professor, Department of Mechanical Engineering, University of Alabama, Tuscaloosa, AL
27. Hsi-Yuan "Steven" Chen (2014-2018), Applied Scientist, Amazon Robotics, North Reading, MA
28. Victor Duenas (2015-2018), Assistant Professor, Department of Mechanical and Aerospace Engineering, Syracuse University, Syracuse, NY
29. Ryan Licitra (2013-2017), NRC Fellow, Air Force Research Laboratory, Eglin Air Force Base, Fort Walton Beach, FL

30. Indrasis Chakraborty (2014-2017), Data Scientist, Lawrence Livermore National Laboratory, Livermore, CA
31. Serhat Obuz (2012-2016), Assistant Professor, Eskisehir Osmangazi University, Turkey
32. Anup Parikh (2012-2016), Staff Scientist, Sandia National Laboratory, Albuquerque, NM
33. Teng-Hu Cheng (2011-2015), Assistant Professor, Department of Mechanical Engineering, National Chiao Tung University, Hsinchu, Taiwan
34. Matthew Bellman (2010-2015), Co-Founder and Chief Technical Officer, Myolyn LLC, Gainesville, FL
35. Ryan Downey (2010-2015), Neuro-imaging Scientific Consultant, NIRx Medical Technologies, Charleston, SC
36. Patrick Walters (2011-2015), Staff Researcher, Naval Surface Warfare Center, Panama City, FL
37. Justin Klotz (2011-2015), Staff Researcher, Department of Defense, Huntsville, AL
38. Rushikesh Kamalapurkar (2010-2014), Associate Professor, Department of Mechanical and Aerospace Engineering, University of Florida, Gainesville, FL
39. Brendan Bialy (2010-2014), Staff Researcher, Air Force Research Laboratory, Eglin Air Force Base, Fort Walton Beach, FL
40. Sankrith Subramanian (2007-2012), xG Technology, Inc., Fort Lauderdale, FL
41. Nic Fischer (2009-2012), Head of Autonomy, Agtonomy, Menlo Park, CA
42. Qiang Wang (2008-2012), Founder, QJWD Biomedical, Gainesville, FL
43. Huyen Dinh (2008-2012), Professor, University of Transport and Communication, Hanoi, Vietnam
44. Dohee Kim (2008-2011), Hyundai Motor Company, Korea
45. Zhen Kan (2007-2011), Professor, Department of Automation, University of Science and Technology of China
46. Marcus Johnson (2007-2011), Project Manager, Aviation Systems Division, NASA Ames Research Center, Moffett Field, CA
47. Ashwin Dani (2007-2011), Associate Professor, Department of Electrical Engineering, University of Connecticut, Storres, CT
48. Shubhendu Bhasin (2007-2011), Professor, Department of Electrical Engineering, Indian Institute of Technology, Delhi, India
49. Zach Wilcox (2006-2010), Service Manager, Waterfront Construction, Seattle, WA
50. Nitin Sharma (2006-2010), Associate Professor, Department of Biomedical Engineering, NC State University, Raleigh, NC
51. Siddhartha Mehta (2007-2010), Postdoctoral Fellow, Eglin Air Force Base, Fort Walton Beach, FL
52. Rhoe (Tony) Thompson (2006-2009), Branch Technical Advisor, Air Force Research Laboratory, Eglin Air Force Base, Fort Walton Beach, FL
53. Parag Patre (2005-2009), Senior Controls and Robotics Engineer, TE Connectivity in Harrisburg, PA
54. William Mackunis (2006-2009), Professor, Embry-Riddle Aeronautical University, Daytona Beach, FL
55. Keith Dupree (2005-2009), Staff Researcher, Johns Hopkins Applied Physics Laboratory, Baltimore, MD
56. Kent Kaiser (2005-2008), Honda Aircraft Company, Greensboro, NC
57. Guoqiang Hu (2004-2007), Professor, School of Electrical and Electronic Engineering, Nanyang Technological University (NTU), Singapore

Co-Advised Ph.D. Students

1. Caleb Bowyer co-advised with John Shea, University of Florida (2025), Research Scientist, Loss Prevention Research Council, Gainesville, FL.
2. Arman Sargolzaei co-advised with Carl Crane, University of Florida (2020), Assistant Professor, Department of Mechanical Engineering, University of South Florida, FL
3. Tom Galluzzo co-advised with Carl Crane, University of Florida (2006), Founder and CEO, IAM robotics, MI
4. Sanjay Solanki co-advised with Carl Crane, University of Florida (2006), IAM robotics, MI
5. Vilas Chitrakaran co-advised with Darren Dawson, Clemson University (2006), Senior Roboticist, Arrival, London, UK
6. Michael McIntyre co-advised with Darren Dawson, Clemson University (2006), Professor, Electrical and Computer Engineering, University of Louisville, KY
7. Jinho Lee co-advised with John Ziegert, University of Florida (2005), Samsung Corning Precision Glass, Korea
8. Jian Chen co-advised with Darren Dawson, Clemson University (2005), Professor, College of Control Science and Engineering, Zhejiang University, China
9. Yongchun Fang co-advised with Darren Dawson, Clemson University (2002), Dean, College of Artificial Intelligence, Nankai University, China

Advisor M.S. Students (thesis)

1. Christian Harris (2017-2020), Lockheed Martin Advanced Algorithms Technical Center, Orlando, FL
2. Jason Nezvadovitz (2016-2017), Staff Researcher, MIT Lincoln Laboratories, Lexington, MA
3. Manelle Merad (2013-2014), France
4. Fanny Bouillon (2012-2013), France
5. Celine Laplassotte (2011-2012), MBA program, Paris, France
6. Ganeshram Jayaraman (2007-2010), Research Intern, Technical University of Munich (TUM)
7. Sankrith Subramanian (2007-2009), Doctoral Student, UF, FL
8. Keith Stegath (2005-2007), Private Company, Gainesville, FL
9. Chien-Hao Liang (2005-2007), Taiwan
10. Sumit Gupta (2004-2006), Moore Tool Co. Inc., Bridgeport, CT
11. Charu Makkar (2004-2006), Deloitte Consulting LLP, Chicago, IL

Scholars, Research Scientists, and Postdoctoral Researchers (not former students)

1. Wenqian Xue, (2024-present) University of Florida, FL
2. Dan Guralnik, (2019-2025) Assistant Professor, Ohio University, OH
3. Marcio de Queiroz, (2019) Professor, Louisiana State University, LA
4. Joel Rosenfeld, (2014-2017) Assistant Professor, University of South Florida, FL
5. Hiroyuki Kawai, (2013-2014) Kanazawa Institute of Technology, Japan
6. Can Ulas Dogruer, (2012-2013) Hacettepe University, Turkey
7. Yasunori Kawai, (2012-2013) Kanazawa University, Japan
8. Dong Kyoung Chwa, (2011-2012) Ajou University, China
9. Hakjae Kim, (2010-2012) National Geospatial Intelligence Agency, DC
10. Hee-Tae Chung, (2010) Pusan University of Foreign Studies, Pusan, South Korea
11. Nick Gans, (2005-2009) University of Texas at Arlington, TX
12. Lennon Corke, (2007) Australian Research Centre for Aerospace Automation, Australia

13. Hoi Bum Chung, (2006-2007) Sunchon National University, China
14. Wei Wang, (2006) Harbin Institute of Technology, China

Invited Briefings, Seminars and Plenary Lectures

- Invited Seminar, “Lyapunov-Based Deep Learning Methods,” IFAC TC 1.2 Webinar: Adaptive & Learning Systems (November 2025)
- Invited Seminar, “Deep Learning and Data Intermittency for Autonomous Systems,” Institute for Human & Machine Cognition (IHMC) (August 2025)
- Invited Seminar, “Assured Autonomy for Uncertain and Data Intermittent Systems,” University of Illinois Urbana-Champaign (April 2025)
- Invited Briefing, “UF Mechanical & Aerospace Engineering Overview,” Pratt & Whitney (August 2024)
- Invited Briefing, “UF Mechanical & Aerospace Engineering Overview,” GE Aerospace (July 2024)
- Invited Seminar, “Assured Autonomy for Uncertain Systems,” Mathworks (June 2024)
- Invited Briefing, “UF National Security Focus: Autonomy, Weapon Systems, & Mine Counter Measures in Cyber, Naval, Air and Space Domains,” Staff Briefing for Senator Rick Scott (June 2024)
- Invited Seminar, “Assured Autonomy for Uncertain and Data Intermittent Systems,” Rutgers University (February 2024)
- Invited Briefing, “Autonomous Systems in Contested Environments,” SMI Consulting (November 2023)
- External Plenary, “Lyapunov-based Deep and Recurrent Learning Methods for Assured Autonomy,” Collins Aerospace Control Systems for Aerospace workshop, Corke, Ireland (November 2023)
- Jack and Ann Waddey Invited Seminar, “Lyapunov-based Deep and Recurrent Learning Methods for Assured Autonomy,” Auburn University (November 2023)
- Invited Seminar, “Assured Autonomy: Learning for Optimization and Control,” University of Alabama (January 2023)
- Invited Seminar, “Assured Autonomy: Learning for Optimization and Control,” Embry Riddle Aeronautical University (September 2022)
- Invited Seminar, “Assured Autonomy: Learning for Control and Parameter Estimation,” Raytheon (June 2022)
- Invited Seminar, “Assured Autonomy: Uncertainty, Optimality, and Intermittent Information,” University of Houston (March 2022)
- Invited Seminar, “Assured Autonomy: Uncertainty, Optimality, and Intermittent Information,” North Carolina State University (January 2022)
- Invited Seminar, “Intermittent Image Based Feedback,” Conference on Control Technology and Applications (CCTA) Workshop entitled The Confluence of Vision and Control, virtual (August 08, 2021)
- Invited Seminar, “Assured Autonomy: Uncertainty, Optimality, and Data Intermittency,” Louisiana State University (April 2021)
- Invited Seminar, “Assured Autonomy: Uncertainty, Optimality, and Data Intermittency,” Office of the Under Secretary of Defense (Research and Engineering), DoD Basic Research Forum, Virtual. (February 25, 2021)
- Invited Talk, “Multiple Timescale Deep Learning,” Workshop: Uncertainty Management and Machine Learning in Engineering Applications, Virtual. (November 16-17 2020)

- Keynote Talk, “The Intermittent Joy of Intermittent Feedback,” International Symposium on Test Automation and Instrumentation (ISTAI 2020) Xining, China (Dec. 2020)
- Plenary Talk, “The Intermittent Joy of Intermittent Feedback,” 16th International Conference on Control, Automation, Robotics and Vision (ICARCV 2020) Shenzhen, China (Dec. 2020)
- Keynote Talk, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods” 2020 Mechatronics Conference and Workshops, Stillwater, OK (October 2020)
- Invited Seminar, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods,” University of Texas Arlington. (September 2020)
- Keynote Talk, “The Intermittent Joy of Intermittent Feedback” Southeast Robotics Symposium, Atlanta Georgia. (October 2019)
- Keynote Talk, “Closed-loop FES Cycling” Lyon Cyber Bike 2019, Lyon, France. (September 2019)
- Invited seminar, “Control of Uncertain Autonomous Systems with Intermittent Feedback,” University of South Florida, Tampa, Florida. (April 2019)
- Invited seminar, “Opportunities for computational reductions, faster learning, and solutions for more complex ADP problems”, ARO workshop on Distributed Reinforcement Learning and Reinforcement Learning Games, College Park, Maryland (April 2019)
- Invited seminar, “Control of Uncertain Autonomous Systems with Intermittent Feedback,” Lockheed Martin, Orlando, Florida. (February 2019)
- Invited seminar, “Control of Uncertain Autonomous Systems with Intermittent Feedback,” University of Texas Austin, Austin, Texas. (February 2019)
- Invited seminar, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods,” University of Central Florida, Orlando, Florida. (November 2018)
- IEEE Distinguished Lecture, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods,” Villanova University, Philadelphia, Pennsylvania. (October 2018)
- IEEE Distinguished Lecture “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods,” Temple University, Philadelphia, Pennsylvania. (October 2018)
- Keynote Talk, “Autonomous Systems with Intermittent/ Limited Image-Based Feedback” IEEE ECTM, Cuenca, Ecuador (October 2018)
- IEEE Distinguished Lecture, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods,” Escuela Superior Politécnica del Litoral, Guayaquil, Ecuador. (October 2018)
- Keynote Talk, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods” Chinese Control and Decision Conference (CCDC), Shenyang, China (June 2018)
- Invited seminar, “Networked Autonomous Systems: Connectivity, Scalability and Intermittency” Northeastern University, Shenyang, China (June 2018)
- Keynote Talk, “Closed-loop Control of Man and Machine: Insights from Nonlinear, Adaptive, and Switched System Methods” IEEE International Conference on Control and Automation, Anchorage, Alaska (June 2018)
- Invited seminar, “Cyber Human Interaction: A Control Systems/Robotics Perspective on Functional Electrical Stimulation” Institute for Robotics and Intelligent Machines, Georgia Tech, Atlanta, Georgia (October 2017)
- IEEE Distinguished Lecture, “Autonomous Systems with Intermittent/ Limited Image-Based Feedback,” Zhejiang University (Apr. 2017)

- Invited seminar, “Feedback Control Advancements in Functional Electrical Stimulation: Cybernetics for Individuals with Neurological Conditions” Duke University, (March 2017)
- Webinar Speaker, “Cybernetic Cycling: A Nonlinear Switched Systems Approach to Facilitate Neurological Rehabilitation”, Control Systems Forum, Missouri University of Science and Technology, (Dec. 2016)
- IEEE Distinguished Lecture, “Cybernetic Cycling: A Nonlinear Switched Systems Approach to Facilitate Neurological Rehabilitation”, Iowa State University (Nov. 2016)
- Semi-Plenary, “Cybernetic Cycling: A Nonlinear Switched Systems Approach to Facilitate Neurological Rehabilitation”, 10th IFAC Symposium on Nonlinear Control Systems, Monterey, California, (August 2016)
- IEEE Distinguished Lecture, “Cybernetic Cycling: A Nonlinear Switched Systems Approach to Facilitate Neurological Rehabilitation”, IEEE Santa Clara Valley Chapter (August 2016)
- Plenary, Assured Autonomy for Agents in Contested Environments”, 4th Annual Meeting of the AFRL Mathematical Modeling and Optimization Institute, Eglin AFB, Shalimar Florida (2016)
- IEEE Distinguished Lecture, “Cybernetic Cycling: Fusing Robotics and Closed-Loop Control to Enable Rehabilitation”, Nanyang Technological University, Singapore (November 2015)
- IEEE Distinguished Lecture, “Concurrent Learning-Based Adaptive Dynamic Programming for Autonomous Agents”, Massachusetts Institute of Technology, Boston, Massachusetts (January 2014)
- Invited seminar, “Concurrent Learning-Based Adaptive Dynamic Programming for Autonomous Agents”, Embry-Riddle University, Daytona Beach, Florida (October 2013)
- Invited seminar, “Theoretical and Experimental Outcomes for Fatigue and Delay Compensation in Closed-Loop Muscle Control”, Kyoto University, Kyoto, Japan (May 2013)
- Invited seminar, “Theoretical and Experimental Outcomes of Closed-Loop Neuromuscular Control Methods to Yield Human Limb Motion”, Center for Control Science and Technology, University of Texas, Dallas (March 2013)
- Invited seminar, “Lyapunov-based Control of Human Skeletal Muscle”, Workshop on Vistas in Control, University of California Santa Barbara, CA (Nov. 2011)
- Invited seminar, “Lyapunov-based Methods for System Delays and Actuator Saturation in Uncertain Nonlinear Systems”, Kirtland AFB, Albuquerque, NM (May 2011)
- Invited seminar, “Nonlinear Control of Uncertain Fatigued Human Skeletal Muscle: Theory and Experiments” College of Engineering Controls Seminar, University of Michigan, Ann Arbor, Michigan (January 2011)
- Invited seminar, “Lyapunov-based Control of Human Limb Motion through Neuromuscular Electrical Stimulation”, Tianjin University, China (December 2009)
- Invited seminar, “A Homography-based Approach to Image-based Pose Estimation and Control” Nankai University, China (December 2009)
- Invited seminar, “RISE: What role can it play in robust and adaptive control for aircraft?” NASA Dryden, Edwards AFB, Lancaster CA (September 2009)
- Invited seminar, “Nonlinear Control of Engineering Systems”, Science for Life seminar series, Howard Hughes Medical Institute-University of Florida Science for Life Program, University of Florida, (February 2008)
- Invited seminar, “Lyapunov-Based Control of Uncertain Nonlinear Systems”, Department of Aerospace Engineering, Texas A&M University, (May 2007)
- Invited seminar, “Lyapunov-Based Control of Uncertain Nonlinear Systems”, Department of Mechanical Engineering, University of San Diego, (December 2006)
- Invited seminar, “A Lyapunov-Based Approach to Control Engineering Systems,” The

Center for Control, Dynamical Systems, and Computation Spring Seminar, University of California Santa Barbara, (May 2006)

- Invited seminar, “A Lyapunov-Based Approach to Visual Servo Control,” Department of Aerospace Engineering, Texas A&M University, (April 2006)
- Invited seminar, “A Lyapunov-Based Approach to Visual Servo Control and Path Planning,” Vision, Robotics-HCI Seminar, University of Illinois, (April 2006)
- Invited seminar, “Lyapunov-Based Methods for Visual Servo Control Systems,” Department of Aerospace Engineering, Virginia Polytechnic Institute, (February 2006)
- Invited seminar, “Lyapunov-Based Robotic Control Applications,” Field Robotics Community of Practice Meeting, John Deere Technology Center, Moline, Illinois, (February 2006)
- Invited seminar, “A Lyapunov-Based Approach to Visual Servo Control and Path Planning,” Control and Dynamical Systems Seminar, California Institute of Technology, (November 2005)
- Plenary Lecturer, *IEEE International Workshop on Robot Motion and Control (ROMOCO)*, Poznan, Poland, (June 2005)
- Invited seminar, “Applications of Advanced Control Research at Oak Ridge National Laboratory,” Department of Electrical Engineering, University of Florida, (June 2003)
- Invited seminar, “Lyapunov-Based Visual Servo Control via Homography Constructs,” Center for Intelligent Systems Spring Seminar, Department of Electrical Engineering and Computer Science, Vanderbilt University, (March 2003)
- Invited seminar, “Monocular Visual Servo Control: A Lyapunov-Based Approach,” George W. Woodruff School of Mechanical Engineering Automation and Mechatronics Seminar, Georgia Institute of Technology, (March 2003)
- Invited seminar, “The State of the Art in Robotics, 2002 and Beyond,” University of Florida Forum on Mechanization and Robotics for the Horticultural Crops, (February 2003)
- Invited technical advisor for sensing and robotics technology at the Robotic Citrus Harvesting Technology Forum, sponsored by the University of Florida Citrus Research and Education Foundation, (April 2002)
- Invited seminar, “Addressing Biomedical Needs through Robotics Science and Engineering,” University of Tennessee Medical Center, Pathology Department, (February 2002)
- Invited seminar, “Design and Control of a Meso-Scale Piezoelectric Mobility Platform,” Louisiana State University, Department of Mechanical Engineering Seminar, (September 2001)
- Invited seminar, “Nonlinear Control of Robotic Systems,” University of Central Florida, Department of Electrical Engineering Seminar, Orlando, Florida, (April 2000)
- Invited seminar, “Mechatronics Research,” ORNL, Robotics and Process Systems Division, Oak Ridge, Tennessee, (January 2000)

Publications

Google Scholar (GS) citation metrics are used to capture citations of research monographs and to capture citations of IEEE conference papers, which are peer-reviewed publications that are archived via IEEE Xplore and are highly cited as a means to convey more current research than journal publications: journal publications are still considered the gold standard publication in my community. I have over 22,000 GS citations with an H-index of 77.

Edited Books

1. W. E. Dixon, Section Editor, *Complexity and Nonlinearity in Autonomous Robotics, Encyclopedia of Complexity and System Science*, Springer, 2009, ISBN: 978-0-387-75888-6.

Research Monographs

1. R. Kamalapurkar, P. S. Walters, J. A. Rosenfeld, W. E. Dixon, *Reinforcement Learning for Optimal Feedback Control: A Lyapunov-based Approach*, Springer, 2018, ISBN 978-3-319-78384-0.
2. A. Behal, W. E. Dixon, B. Xian, and D. M. Dawson, *Lyapunov-Based Control of Robotic Systems*, CRC Press, 2009, ISBN: 0849370256.
3. W. E. Dixon, A. Behal, D. M. Dawson, and S. Nagarkatti, *Nonlinear Control of Engineering Systems: A Lyapunov-Based Approach*, Birkhäuser Boston, 2003, ISBN: 0-8176-4265-X.
4. W. E. Dixon, D. M. Dawson, E. Zergeroglu, and A. Behal, *Nonlinear Control of Wheeled Mobile Robots, Vol. 262 Lecture Notes in Control and Information Sciences*, Springer-Verlag London Ltd, 2000, ISBN: 1-85233-414-2.

Book Chapters

1. F. Zegers, S. Phillips, and W. E. Dixon, "Event-Driven Distributed Cyber-Physical Systems" in *Smarter Cyber Physical Systems: Enabling Methodologies and Applications*, Edited by Y. Wan, K. G. Vamvoudakis, Y. Chen, and F. L. Lewis, CRC Press, 2024.
2. M. L. Greene, P. Deptula, R. Kamalapurkar, and W. E. Dixon, "Mixed Density Methods for Approximate Dynamic Programming" in *Handbook of Reinforcement Learning and Control*, Edited by K. G. Vamvoudakis, Y. Wan, F. L. Lewis, and D. Cansever, Springer International Publishing, pp. 139–172, 2021.
3. W. E. Dixon, "Robust Control" in *Encyclopedia of Robotics*, Edited by Marcelo H. Ang Jr., Oussama Khatib and Bruno Siciliano, Springer, London, 2020.
4. W. E. Dixon, "Reinforcement Learning for Approximate Optimal Control" in *Encyclopedia of Systems and Control*, Edited by John Baillieul and Tariq Samad, Springer, London, 2020.
5. W. E. Dixon, "Intermittent Image-Based Estimation" in *Encyclopedia of Systems and Control*, Edited by John Baillieul and Tariq Samad, Springer, London, 2020.
6. A. Parikh, R. Kamalapurkar, and W. E. Dixon, "Data-Based Learning for Uncertain Robotic Systems" in *Adaptive Control for Robotic Manipulators*, Edited by D. Zhang and B. Wei, Taylor & Francis Group, pp. 40-48, 2016.
7. R. Kamalapurkar, P. Walters, and W.E. Dixon "Model-Based Reinforcement Learning for Approximate Optimal Regulation," in *Control of Complex Systems: Theory and Applications*, Edited by K. G. Vamvoudakis and S. Jagannathan, Butterworth-Heinemann: Elsevier, pp. 247-273, 2016.
8. R. Downey, R. Kamalapurkar, N. Fischer, and W. E. Dixon "Compensating for Fatigue-Induced Time-Varying Delayed Muscle Response in Neuromuscular Electrical Stimulation Control," in *Recent Results on Nonlinear Delay Control Systems: In honor of Miroslav Krstic*, Edited by I. Karafyllis, M. Malisoff, F. Mazenc, P. Pepe, Springer, pp. 143-161.
9. Z. Kan, J. M. Shea, W. E. Dixon, "Navigation Function Based Decentralized Control of A Multi-Agent System with Network Connectivity Constraints," in *Examining Robustness and Vulnerability of Networked Systems*, Edited by S. Butenko, E. L. Pasiliao, V. Shylo, NATO Science for Peace and Security Series - D: Information and Communication Security, Vol. 35, pp. 104 – 119, 2014.
10. L. Navaravong, J. M. Shea, E. L. Pasiliao, G. Barnette and W. E. Dixon, "Optimizing Network Topology to Reduce Aggregate Traffic in Systems of Mobile Agents," in *Models*,

- Algorithms, and Technologies for Network Analysis*, Edited by B. Goldengorin and V. A. Kalyagin and P. M. Pardalos, Springer New York, pp. 129-149, Springer Proceedings in Mathematics & Statistics, Vol. 32, 2013.
11. S. Bhasin, R. Kamalapurkar, M. Johnson, K. G. Vamvoudakis, F. L. Lewis, and W. E. Dixon, "An Actor-Critic-Identifier Architecture for Adaptive Approximate Optimal Control," in *Reinforcement Learning and Approximate Dynamic Programming for Feedback Control*, Edited by F. L. Lewis and D. Liu, Wiley and IEEE Press, New Jersey, pp. 258-278, IEEE Press Series on Computational Intelligence, 2013.
 12. S. Subramanian, E. L. Pasiliao, J. M. Shea, J. W. Curtis, and W. E. Dixon, "Throughput Maximization in CSMA Networks with Collisions and Hidden Terminals," in *Dynamics of Information Systems: Mathematical Foundations*, Edited by A. Sorokin, R. Murphey, M. T. Thai, and P. M. Pardalos, Springer, pp. 195-206, 2012.
 13. A. P. Dani, Z. Kan, N. Fischer, and W. E. Dixon, "Real-time Structure and Motion Estimation in Dynamic Scenes using a Single Camera" in *Robotic Vision: Technologies for Machine Learning and Vision Applications*, Edited by J. Garcia-Rodriguez and M. C. Quevedo, IGI Global Publication, pp. 173-191, July 12, 2012.
 14. A. Dani and W. E. Dixon, "Single Camera Structure and Motion Estimation" in *Visual Servoing via Advanced Numerical Methods*, Edited by G. Chesi and K. Hashimoto, Springer, *Lecture Notes in Control and Information Sciences* Volume 401, 2010, pp. 209-229.
 15. S. Mehta, G. Hu, N. Gans, and W. E. Dixon, "A Daisy-Chaining Visual Servoing Approach with Applications in Tracking, Localization, and Mapping," in *Robot Localization and Map Building*, Edited by A. Lazinica, Chapter 20, pp. 383-408, Edited by Hanafiah Yussof, ISBN: 978-953-7619-83-1, InTech, March 2010.
 16. G. Hu, N. Gans, and W. E. Dixon, "Adaptive Visual Servo Control" in *Complexity and Nonlinearity in Autonomous Robotics, Encyclopedia of Complexity and System Science*, Springer, pp. 42-63, Vol. 1, 2009, ISBN: 978-0-387-75888-6.
 17. N. Gans, G. Hu, and W. E. Dixon, "Image-Based State Estimation" in *Complexity and Nonlinearity in Autonomous Robotics, Encyclopedia of Complexity and System Science*, Springer, pp. 4751-4776, Vol. 5, 2009, ISBN: 978-0-387-75888-6.
 18. W. E. Dixon, "Introduction to Complexity and Nonlinearity in Autonomous Robotics" in *Complexity and Nonlinearity in Autonomous Robotics, Encyclopedia of Complexity and System Science*, Springer, pp. 1224-1226, Vol. 2, 2009, ISBN: 978-0-387-75888-6.
 19. S. Bhasin, K. Dupree and W. E. Dixon, "Control of Robotic Systems Undergoing a Non-Contact to Contact Transition" in *Robot Manipulators*, Edited by Marco Ceccarelli, pp. 113-136, 2008, ISBN: 978-953-7619-06-0.

Journal Papers

(Published or to appear)

1. J. Philor, C. Nino, P. Amy, and W. E. Dixon, "Indirect Herding Control through a Chain-of-Influence by Uncertain Intermediaries," *IEEE Control Systems Letters*, to appear.
2. R. Hart, O. S. Patil, Z. Bell, and W. E. Dixon, "Concurrent Learning for System Identification and Control Using Lyapunov-Based Deep Neural Networks," *IEEE Control Systems Letters*, to appear.
3. H. Sweatland, E. Pettit, H. Patel, N. De La Mata, C. Conover, E. Griffis, J. Yarrow, M. Schiefer, and W. E. Dixon, "Development and Validation of a Kinematic Hindlimb Cycling Model for Rats," *Nature: Scientific Reports*, to appear.
4. T. Taivassalo, K. Stubbs, M. Bomma, D. J. Lott, E. Griffis, H. Sweatland, C. Makumi, J.-A. Coppola, R. Shih, H. L. Sweeney, and W. E. Dixon, "Evaluation of a control paradigm

- allowing heart rate guided rehabilitative exercise for boys with Duchenne muscular dystrophy," *Journal of NeuroEngineering and Rehabilitation*, to appear.
5. E. Griffis, O. Patil, W. Makumi, and W. E. Dixon, "Adaptive Output Feedback Control Using Lyapunov-Based Deep Recurrent Neural Networks (Lb-DRNNs)," *IEEE Transactions on Automatic Control*, to appear.
 6. Y. Zheng, O. M. Anubi, and W. E. Dixon, "Resilient State Recovery Using Measurement Support Prior," *SIAM Journal on Control and Optimization (SICON)*, Vol. 63, No. 5, pp. 3703-3727 (2025).
 7. C. Nino, O. Patil, C. Petersen, S. Phillips, and W. E. Dixon, "Collaborative Spacecraft Servicing under Partial Feedback using Lyapunov-based Deep Neural Networks," *Journal of Astronautical Sciences*, Vol. 72, No. 40, pp. 1-25 (2025).
 8. O. Patil, D. Le, E. Griffis, and W. E. Dixon, "Lyapunov-Based Deep Residual Neural Network (ResNet) Adaptive Control," *IEEE Access*, Vol. 13, pp. 117943-117952 (2025).
 9. W. Makumi, O. S. Patil, and W. E. Dixon, "Lyapunov-based Adaptive Deep System Identification for Approximate Dynamic Programming," *Automatica*, Vol. 180, pp. 112462 (2025).
 10. C. Nino, O. S. Patil, J. Insinger, M. Eisman, and W. E. Dixon, "Online ResNet-Based Adaptive Control for Nonlinear Target Tracking," *IEEE Control Systems Letters*, Vol. 9, pp. 907-912 (2025).
 11. C. Nino, O. S. Patil, S. Edwards, and W. E. Dixon, "Distributed RISE-based Control for Exponential Heterogeneous Multi-Agent Target Tracking of Second-Order Nonlinear Systems," *IEEE Control Systems Letters*, Vol. 9, pp. 811-816 (2025).
 12. D. Guralnik, Y. Wang, and W. E. Dixon, "Topology-Aware Planning Under Linear Temporal Logic Constraints," *Journal of Applied and Computational Topology*, Vol. 9, No. 17 (2025).
 13. X. Shen, E. Griffis, W. Wu, and W. E. Dixon, "Adaptive Control via Lyapunov-Based Deep Long Short-Term Memory Networks," *IEEE Transactions on Automatic Control*, Vol. 70, No. 9, pp. 6199-6205 (2025).
 14. O. S. Patil, R. Kamalapurkar, and W. E. Dixon, "Saturated RISE Controllers with Exponential Stability Guarantees: A Projected Dynamical Systems Approach," *IEEE Transactions on Automatic Control*, Vol. 70, No. 7, pp. 4936-4942 (2025).
 15. H. Sweatland, A. Isaly, E. Griffis, and W. E. Dixon, "Optimization-Based Controllers for Passivity and Safety Constraints," *IEEE Transactions on Automatic Control*, Vol. 70, No. 5, pp. 3339-3345 (2025).
 16. D. Le, O. Patil, C. Nino, and W. E. Dixon, "Accelerated Gradient Approach For Deep Neural Network-based Adaptive Control of Unknown Nonlinear Systems," *IEEE Transactions on Neural Networks and Learning Systems*, Vol. 36, No. 4, pp. 6299-6313 (2025).
 17. M. L. Greene, M. S. Sakha, R. Kamalapurkar, and W. E. Dixon, "Approximate Dynamic Programming for Trajectory Tracking of Switched Systems," *IEEE Transactions on Automatic Control*, Vol. 70, No. 2, pp. 1024-1037 (2025).
 18. F. Zegers, D. Guralnik, and W. E. Dixon, "Event-Triggered Multi-Agent System Rendezvous with Graph Maintenance in Varied Hybrid Formulations: A Comparative Study," *IEEE Transactions on Automatic Control*, Vol. 69, No. 12, pp. 8308-8322 (2024).
 19. G. Rotithor, T. Taplin, A. P. Dani, and W. E. Dixon, "Switching of Asymptotically Stable and Uniformly Ultimately Bounded Systems With Applications to Machine Vision," *IEEE Transactions on Automatic Control*, Vol. 69, No. 9, pp. 6246-6252 (2024).

20. A. Isaly, M. Mamaghani, R. G. Sanfelice, and W. E. Dixon, "On the Feasibility and Continuity of Feedback Controllers Defined by Multiple Control Barrier Functions," *IEEE Transactions on Automatic Control*, Vol. 69, No. 11, pp. 7326-7339 (2024).
21. D. Guralnik, P. Stiller, F. Zegers, and W. E. Dixon, "Plug-and-Play Cooperative Navigation: From Single-Agent Navigation Fields to Graph-Maintaining Distributed MAS Controllers," *IEEE Transactions on Automatic Control*, Vol. 69, No. 8, pp. 5262-5277 (2024).
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23. D. Le, A. R. Teel, and W. E. Dixon, "A Switched System Dwell-time Update Mechanism For Path Following With Intermittent State Feedback Constraints," *IEEE Transactions on Automatic Control*, Vol. 69, No. 7, pp. 4820-4827 (2024).
24. K. Stubbs, B. Allen, and W. E. Dixon, "Telerehabilitation Through a Remotely Operated Motorized Functional Electric Stimulation Actuated Cycle," *IEEE Control Systems Technology*, Vol. 32, No. 3, pp. 744-754, (2024).
25. E. Griffis, O. Patil, R. Hart, and W. E. Dixon, "Lyapunov-Based Long Short-Term Memory (Lb-LSTM) Neural Network-Based Adaptive Observer," *IEEE Control Systems Letters*, Vol. 8, pp. 97-102 (2024).
26. R. Hart, E. Griffis, O. Patil, and W. E. Dixon, "Lyapunov-Based Physics-Informed Long Short-Term Memory (LSTM) Neural Network-Based Adaptive Control," *IEEE Control Systems Letters*, Vol. 8, pp. 13-18 (2024).
27. C. Nino, O. Patil, and W. E. Dixon, "Second-Order Heterogeneous Multi-Agent Target Tracking without Relative Velocities," *IEEE Control Systems Letters*, Vol. 7, pp. 3663-3668 (2023).
28. Z. Xu, F. Zegers, N. Baharisangari, B. Wu, A. Phillips, W. E. Dixon, and U. Topcu, "Controller Synthesis for Multi-Agent Systems with Intermittent Communication and Metric Temporal Logic Specifications," *IEEE Access*, Vol. 11, pp. 91324-91335 (2023).
29. E. Griffis, O. Patil, Z. Bell, and W. E. Dixon, "Lyapunov-Based Long Short-Term Memory (Lb-LSTM) Neural Network-Based Control," *IEEE Control Systems Letters*, Vol. 7, pp. 2976-2981 (2023).
30. W. Makumi, Z. Bell, and W. E. Dixon, "Approximate Optimal Indirect Regulation of an Unknown Agent with a Lyapunov-Based Deep Neural Network," *IEEE Control Systems Letters*, Vol. 7, pp. 2773-2778 (2023).
31. M. L. Greene, P. Deptula, S. Nivison, and W. E. Dixon, "Approximate Optimal Trajectory Tracking with Sparse Bellman Error Extrapolation," *IEEE Transactions on Automatic Control*, Vol. 68, No. 6, pp. 3618-3624 (2023).
32. R. Sun, S. Bharadwaj, Z. Xu, U. Topcu, and W. E. Dixon, "Reactive Synthesis for Relay-Explorer Consensus with Intermittent Communication," *Automatica*, Vol. 154, pp. 111057 (2023).
33. F. Zegers, R. Sun, G. Chowdhary, and W. E. Dixon, "Distributed State Estimation with Deep Neural Networks for Uncertain Nonlinear Systems under Event-Triggered Communication," *IEEE Transactions on Automatic Control*, Vol. 68, No. 5, pp. 3107-3114 (2023).
34. M. Greene, Z. Bell, S. Nivison, and W. E. Dixon, "Deep Neural Network-based Approximate Optimal Tracking for Unknown Nonlinear Systems," *IEEE Transactions on Automatic Control*, Vol. 68, No. 5, pp. 3171-3177 (2023).

35. F. Zegers, P. Deptula, H.-Y. Chen, A. Isaly, and W. E. Dixon, "A Switched Systems Approach to Multi-Agent System Consensus: A Relay-Explorer Perspective," *IEEE Transactions on Robotics*, Vol. 39, No. 1, pp. 605-624 (2023).
36. A. Sargolzaei, F. M. Zegers, A. Abbaspour, C. D. Crane, and W. E. Dixon, "Secure Control Design for Networked Control Systems with Nonlinear Dynamics under Time-Delay-Switch Attacks," *IEEE Transactions on Automatic Control*, Vol. 68, No. 2, pp. 798-811 (2023).
37. M. Ghanbarpour, A. Isaly, R. G. Sanfelice, and W. E. Dixon, "Optimal Safety for Constrained Differential Inclusions using Nonsmooth Control Barrier Functions," *IEEE Control Systems Letters*, Vol. 7, pp. 1303-1308 (2023).
38. B. C. Allen, K. Stubbs, and W. E. Dixon, "Robust Cadence and Power Tracking on a Switched FES Cycle with an Unknown Electromechanical Delay," *IEEE Transactions on Control Systems Technology*, Vol. 31, No. 1, pp. 451-458 (2023).
39. Z. Bell, R. Sun, K. Volle, P. Ganesh, S. Nivison, and W. E. Dixon, "Target Tracking Subject to Intermittent Measurements Using Attention Deep Neural Networks," *IEEE Control Systems Letters*, Vol. 7, pp. 379-384 (2023).
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Conference Papers

1. C. Gonzalez, H. Sweatland, K. Currier, W. E. Dixon, and R. Sanfelice, "Pointwise Optimal Feedback Laws for Hybrid Inclusions using Multiple Control Barrier Functions," In Proc. IEEE Conf. Decis. Control, to appear 2025.
2. S. Kolhe, O. Patil, W. E. Dixon, and J. Fu, "Integral Concurrent Learning Control Barrier Functions for Signal Temporal Logic Tasks under Unknown Dynamics," In Proc. IEEE Conf. Decis. Control, to appear 2025.
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5. C. Bowyer, J. M. Shea, T. Wong, and W. E. Dixon, "Optimizing Sensor Network Fusion for Improved Localization Accuracy in Dec-POMDPs," IEEE International Conference on Machine Learning for Communication and Networking, 2025.
6. C. F. Nino, O. S. Patil, C. D. Petersen, S. Phillips, and W. E. Dixon, "Collaborative spacecraft servicing under partial feedback using Lyapunov-based deep neural networks," AAS/AIAA Space Flight Mechanics Meeting, 2025.
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8. C. Bowyer, J. Shea, T. Wong, and W. E. Dixon "Optimizing Synchronization Times for Tracking a Mobile Asset in GPS-Denied Environments Using Deep Q-Learning," IEEE Military Communication Conference, October 2024.
9. E. Griffis, O. Patil, R. Hart, and W. E. Dixon "Lyapunov-Based Long Short-Term Memory (Lb-LSTM) Neural Network-Based Adaptive Observer," American Control Conference, July 2024.
10. R. Hart, E. Griffis, O. Patil, and W. E. Dixon "Lyapunov-based Physics-Informed Long Short-Term Memory (LSTM) Neural Network-Based Adaptive Control," American Control Conference, July 2024.
11. S. Edwards, A. Isaly, J. Brewer, and W. E. Dixon "Capturing a Non-Cooperative Resident Space Object: A Control Barrier Function Approach," American Control Conference, July 2024.
12. J. Philor, W. Makumi, Z. Bell, W. E. Dixon "Approximate Optimal Indirect Control of an Unknown Agent within a Dynamic Environment using a Lyapunov-Based Deep Neural Network," American Control Conference, July 2024.
13. W. Makumi, Z. Bell, J. Philor, and W. E. Dixon, "Cooperative Approximate Optimal Indirect Regulation of Uncooperative Agents with Lyapunov-Based Deep Neural Network," AIAA SciTech, AIAA 2024-0126, Orlando, FL, January, 2024.
14. A. Isaly, S. Edwards, Z. Bell, and W. E. Dixon, "Weighted Prioritization of Constraints in Optimization-Based Control," IEEE Conference on Decision and Control, December 2023.
15. H. Sweatland, E. Griffis, V. H Duenas, and W. E. Dixon, "Passivity-Based Hybrid Systems Approach to Repetitive Learning Control for FES-Cycling with Control Input Saturation," IEEE Conference on Decision and Control, December 2023.
16. C. F. Nino, O. S. Patil, J. Philor, Z. Bell, and W. E. Dixon, "Deep Adaptive Indirect Herding of Multiple Target Agents with Unknown Interaction Dynamics," IEEE Conference on Decision and Control, December 2023.

17. R. Hart, O. Patil, E. Griffis, and W. E. Dixon, "Deep Lyapunov-Based Physics-Informed Neural Networks (DeLb-PINN) for Adaptive Control Design," *IEEE Conference on Decision and Control*, December 2023.
18. E. Griffis, O. Patil, W. Makumi, and W. E. Dixon, "Deep Recurrent Neural Network-Based Observer for Uncertain Nonlinear Systems," *IFAC World Congress*, July 2023.
19. W. Makumi, M. Greene, Z. Bell, S. Nivison, R. Kamalapurkar, and W. E. Dixon, "Hierarchical Reinforcement Learning-based Supervisory Control of Unknown Nonlinear Systems," *IFAC World Congress*, July 2023.
20. C. F. Nino, F. Zegers, S. Phillips, and W. E. Dixon, "Consensus over Clustered Networks Using Output Feedback and Asynchronous Inter-Cluster Communication," *American Control Conference*, June 2023.
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22. F. Zegers, D. Guralnik, S. Edwards, C.-L. Lee, and W. E. Dixon, "Event-Triggered Consensus for Second-Order Systems: A Hybrid Systems Perspective," *IEEE Conference on Decision and Control*, Cancun, Mexico, December 2022.
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37. A. Kanellopoulos, F. Fotiadis, C. Sun, Z. Xu, K. G. Vamvoudakis, U. Topcu, and W. E. Dixon, "Temporal-Logic-Based Intermittent, Optimal, and Safe Continuous-Time Learning for Trajectory Tracking," *IEEE Conference on Decision and Control*, pp. 1263-1268, December 2021.
38. H. M. Sweatland, B. C. Allen, M. L. Greene, and W. E. Dixon, "Deep Neural Network Real-Time Control of a Motorized FES Cycle with an Uncertain Time-Varying Electromechanical Delay," *ASME International Mechanical Engineering Congress and Exposition (IMECE)*, November 2021.
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