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PROFESSIONAL PREPARATION

University of Rochester	Rochester, NY	Optics	B.S., 1982
University of Rochester	Rochester, NY	Optics	M.S., 1983
University of Rochester	Rochester, NY	Optics	Ph.D., 1989
University of Oregon	Eugene, OR	Quantum Optics	1989-1991

APPOINTMENTS

2021 -	Co-Founder, Verilock, Inc.
2020 -	Co-Founder and Senior Developer, ResCon Technologies, LLC
2019 -	Professor, Department of Electrical and Computer Engineering, The Ohio State University
2016 -	Professor, Department of Physics, The Ohio State University
2015	Visiting Professor, Department of Physics, The Ohio State University
2015	Interim Chair, Department of Physics, Duke University
2013 - 2015	Professor of Electrical and Computer Engineering, Duke University
2011 - 2105	Robert C. Richardson Professor of Physics, Duke University
2007 - 2011	Professor of Physics and Biomedical Engineering, Duke University
2005 - 2011	Chair, Department of Physics, Duke University
2004 - 2006	Bass Professor of Physics and Biomedical Engineering, Duke University
2001 - 2015	Director, Quantum Optoelectronics Laboratory, Fitzpatrick Photonics Institute, Duke University
2002 - 2004	Anne T. and Robert M. Bass Associate Professor of Physics and Associate Professor of Biomedical Engineering, Duke University
2000 - 2002	Associate Professor of Physics and Biomedical Engineering, Duke University
1999 - 2003	Associate Director, Center for Nonlinear and Complex Systems, Duke University
1999 - 2000	Associate Professor of Physics and Assistant Research Professor of Biomedical Engineering, Duke University
1995 - 1998	Assistant Professor of Physics and Biomedical Engineering, Duke University
1992 - 1995	Assistant Professor of Physics, Duke University
1989 - 1991	Research Associate, University of Oregon
1982 - 1989	Graduate Research Assistant, University of Rochester

RELATED PUBLICATIONS

1. D. J. Gauthier, I. Fischer, and A. Röhm, 'Learning unseen coexisting attractors,' Chaos **32**, 113107 (2022). https://doi.org/10.1063/5.0116784
2. W. A. S. Barbosa, and D. J. Gauthier, 'Learning spatiotemporal chaos using next-generation reservoir computing,' Chaos **32**, 093137 (2022). https://doi.org/10.1063/5.0098707
3. A. Röhm, D. J. Gauthier, and I. Fischer, 'Model-free inference of unseen attractors: Reconstructing phase space features from a single noisy trajectory using reservoir computing,' Chaos 31, 103127 (2021). https://doi.org/10.1063/5.0065813
4. W. A. S. Barbosa, A. Griffith, G. E. Rowlands, L. C. G. Govia, G. J. Ribeill, M.-H. Nguyen, T. A. Ohki, and D. J. Gauthier, 'Symmetry-aware reservoir computing,' Phys. Rev. E 104, 045307 (2021). https://doi.org/10.1103/PhysRevE.104.045307
5. D. J. Gauthier, E. Bollt, A. Griffith, W. A. S. Barbosa, 'Next generation reservoir computing,' Nat. Commun. **12**, 5564 (2021).
6. D. Canaday, A. Pomerance, and D. J. Gauthier, 'Model-free control of dynamical systems with deep reservoir computing,' J. Phys. Complex. **2**, 035025 (2021). https://doi.org/10.1088/2632-072X/ac24f3
7. A. Griffith, A. Pomerance, and D. J. Gauthier, 'Forecasting Chaotic Systems with Very Low Connectivity Reservoir Computers,' Chaos **29**, 123108 (2019). https://doi.org/10.1063/1.5120710
8. D. Canaday, A. Griffith, and D.J. Gauthier, 'Rapid Time Series Prediction with a Hardware-Based Reservoir Computer,' Chaos **28**, 123119 (2018). https://doi.org/10.1063/1.5048199

9. D.J. Gauthier, 'Reservoir computing: Harnessing a universal dynamical system,' SIAM News **51**:2, 12 (2018). https://sinews.siam.org/Details-Page/reservoir-computing-harnessing-a-universal-dynamical-system
10. N. D. Haynes, M. C. Soriano, D. P. Rosin, I. Fischer, D. J. Gauthier, 'Reservoir computing with a single time-delay autonomous Boolean node,' Phys. Rev. E **91**, 020801 (2015). https://doi.org/10.1103/PhysRevE.91.020801

RELATED PATENTS

A. Griffith and D. Gauthier, 'Optimizing reservoir computers for hardware,' Patent Cooperation Treaty (PCT/US2020/053405) filed Sep. 30, 2020. (U.S. provisional patent application No. 62/908,647, filed Oct. 1, 2019).

D. Canaday, A.J. Pomerance, A. Griffith, and D. Gauthier, 'Model-free control of dynamical systems with deep reservoir computing,' Patent Cooperation Treaty (PCT/US2020/015350), filed Jan. 28, 2020 (U.S. provisional patent No. 62/836,310, filed Apr. 19, 2019).

D. Canaday, D. Gauthier, and A. Griffith, 'Rapid time-series prediction with hardware-based reservoir computer,' Patent Cooperation Treaty (PCT/US2019/024296), filed Mar. 27, 2019. (U.S. provisional patent application No. 62/690,698, filed on Jun. 27, 2018.)

AWARDS

2009 Outstanding Referee of the Physical Review and Physical Review Letters
2006 Fellow of Optica (formerly the Optical Society of America)
2002 Fellow of the American Physical Society
1993 National Science Foundation Young Investigator
1992 U.S. Army Research Office Young Investigator

SYNERGISTIC ACTIVITIES

- Co-Organizer, National Science Foundation Project Scoping Workshop on Accelerating Progress Towards Practical Quantum Advantage (2022)
- Member, National Science Foundation, Review of the Physics Frontiers Center Program (2018 –2019)
- Deputy Editor, *Optica*, Optical Society of America (2016 – 2019)
- Member, Strategic Advisory Board for QuantIC, the Quantum Enhanced Imaging Hub, Glasgow, UK (2015 – present)
- Substantial scientific management experience including Chair of the Duke University Department of Physics for 7 years, lead PI on a DARPA InPho project, and co-lead PI on several MURI projects.