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Employment

Professor, MIT (7/92–)

Junior Fellow, Harvard University Society of Fellows (9/89–7/92)

Technician, Bell Labs (9/81–9/83; 6–12/84)

Visiting Scientist, San Francisco Laser Center (9/83–6/84)

Summer Fellow, Woods Hole Oceanographic Institution (6–9/80; 7–8/83)

Education

Graduate (1/85–1/90, MA, Ph.D.)

Department of Applied and Engineering Physics, Cornell University, Ithaca, NY. Prof. Watt Webb, advisor, working with Profs. David Mermin, John Guckenheimer, Robert Pohl, and Jim Sethna. IBM Graduate Fellowship.

Undergraduate (9/77–6/81, BA)

Swarthmore College, Swarthmore, PA. Physics major, Engineering minor; graduated with High Honors, Phi Beta Kappa, and Sigma Xi; co−captain of the swim team.

Secondary (9/74–6/77)

Plymouth Whitemarsh High School, Plymouth Meeting, PA. Years also spent in Kingston, Jamaica and Oxford, England.

Recognition

Member, National Academy of Engineering

Fellow, American Association for the Advancement of Science

Fellow, American Physical Society

Honorary doctorates from Swarthmore College, Strathclyde University, and the University of Antwerp

Top 100 public intellectuals, Prospect/Foreign Policy

50 leaders in science and technology, Scientific American

40 Modern-Day Leonardos, Museum of Science and Industry

25 Makers, Popular Mechanics

Principal Voice, CNN/Time/Fortune

Brain Scan, The Economist

National Academy of Sciences Great Hall

Mario Pani Prize

Irwin Sizer Award for the Most Significant Improvement to MIT Education

BOOKS

(6) *Designing Reality,* Neil Gershenfeld, Alan Gershenfeld, and Joel Cutcher-Gershenfeld, Basic Books (2017).

(5) *Fab: The Coming Revolution On Your Desktop – from Personal Computers To Personal Fabrication,* Neil Gershenfeld, Basic Books (2005). (BusinessWeek Best of 2005)

(4) *The Physics of Information Technology,* Neil Gershenfeld, Cambridge University Press (2000).

(3) *When Things Start to Think,* Neil Gershenfeld, Henry Holt and Company (1999). (Amazon top 10)

(2) *The Nature of Mathematical Modeling,* Neil Gershenfeld, Cambridge University Press (1999).

(1) *Time Series Prediction: Forecasting the Future and Understanding the Past,* Andreas S. Weigend and Neil A. Gershenfeld eds., Santa Fe Institute Studies in the Sciences of Complexity, Addison−Wesley (1993).

ARTICLES

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(109) *Self-Reconfigurable Robots for Collaborative Discrete Lattice Assembly*, Miana Smith, Amira Abdel-Rahman, and Neil Gershenfeld. 2024 IEEE International Conference on Robotics and Automation (ICRA) May 13-17, 2024. Yokohama, Japan, pp. 3624-3631, doi: 10.1109/ICRA57147.2024.10609866 (2024).

(108) *Online Measurement for Parameter Discovery in Fused Filament Fabrication*, Jake Robert Read, Jonathan Seppala, Filippos Tourlomousis, James A. Warren, Nicole Bakker, Neil Gershenfeld. Integrated Materials Manufacturing and Innovation https://doi.org/10.1007/s40192-024-00350-w (2024).

(107) *Mesoscale material modeling with memoryless isotropic point particles*, Erik Strand, Filippos Tourlomousis, and Neil Gershenfeld. Journal of Computational Science, vol. 75, doi:10.1016/j.jocs.2023.102198 (2024).

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(105) *FibeRobo: Fabricating 4D Fiber Interfaces by Continuous Drawing of Temperature Tunable Liquid Crystal Elastomers*, Jack Forman, Ozgun Kilic Afsar, Sarah Nicita, Rosalie Hsin-Ju Lin, Liu Yang, Megan Hofmann, Akshay Kothakonda, Zachary Gordon, Cedric Honnet, Kristen Dorsey, Neil Gershenfeld, and Hiroshi Ishii. In Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology (UIST '23). https://doi.org/10.1145/3586183.3606732 (2023).

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(98) *Design and Simulation of Phase Synchronizer for Adiabatic Quantum Flux Parametron Circuits*, L. Camron Blackburn, Evan Golden, Alex Wynn, Andrew Wagner, and Neil Gershenfeld, IEEE Transactions on Applied Superconductivity, pp.1-5 (2023).

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