

LAWRENCE CARIN

Education

Ph. D. in Electrical Engineering, August 1989
University of Maryland
College Park, MD

M.S.E.E., December 1986
University of Maryland, College Park

B.S.E.E., May 1985
University of Maryland, College Park

Employment

Provost, 3/1/2021 – present
King Abdullah University of Science and Technology (KAUST)

Vice President for Research, 8/1/2019 – 2/28/2021
Duke University

Vice Provost for Research, 7/1/2014 – 8/1/2019
Duke University

Chief Scientist, 10/1/2017 – present
Infinia ML (startup)
Durham, NC

Chair, Electrical & Computer Engineering Department, 9/1/2011 – 6/30/2014
Duke University

James L. Meriam Distinguished Professor of Engineering, 7/1/2018 – present
William H. Younger Distinguished Professor of Engineering, 7/1/2003 – 1/1/2014
Duke University

Co-Founder and Director of Technology, 5/1/2005 – 9/1/2014
Signal Innovations Group, Inc. (Acquired by BAE Systems in 2014)
Durham, NC

Professor, 1/1/2001 – present
Department of Electrical Engineering
Duke University

Durham, N.C.

Associate Professor, 8/1/1995 – 12/31/2000

Department of Electrical Engineering
Duke University

Associate Professor, 9/1/1994-7/31/1995

Department of Electrical Engineering
Polytechnic University
Brooklyn, N.Y.

Assistant Professor, 9/1/1989-8/31/1994

Department of Electrical Engineering
Polytechnic University

HONORS

James L. Meriam Distinguished Professor of Engineering (2018-present)

William H. Younger Distinguished Professor of Engineering (2003-2014)

IEEE Fellow (2001)

Distinguished Alumnus, University of Maryland Engineering School (2014)

Research Award, Duke University School of Engineering (2002)

Nominated for Duke University Alumni Distinguished Undergraduate Teaching Award (2001-2002)

Member, White House Advisory Panel on the Future of Landmine Research (2002)

Best Paper, OSA Computational Optical Sensing and Imaging, 2013

2000 Applied High-Power Electromagnetics Paper of the Year (conferred by SUMMA Foundation)

DoD SERDP Cleanup Project of the Year (2000 and 2005)

National Science Foundation Research Initiation Award (1992)

Invited Guest Editor, *IEEE Trans. Geoscience Remote Sensing*, June 2001 (on subsurface sensing)

Invited Guest Editor, *Radio Science*, 2003 (on landmine sensing)

Associate Editor: *IEEE Trans. Signal Processing*, *J. Machine Learning Research*, *SIAM J. Imaging Science*, *IEEE Trans. Antennas and Propagation*

PI, Multidisciplinary University Research Initiative (MURI) on landmine sensing, 1996-2001

PI, DARPA MURI on multi-modality inverse scattering, 2002-2007

Full Member, URSI Commission B

Tau Beta Pi and Eta Kappa Nu

REFEREED PUBLICATIONS

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- [2] L. Carin and K. J. Webb, "Characteristic impedance of multi-level, multiconductor hybrid mode microstrip" *IEEE Trans. on Magnetics.*, vol. 25, pp. 2947-2949, July 1989.
- [3] L. Carin and K. J. Webb, "An equivalent circuit model for terminated hybrid-mode multiconductor transmission lines," *IEEE Trans. Microwave Theory Tech.*, vol. MTT-37, pp. 1784-1793, Nov. 1989.
- [3] L. Carin and K. J. Webb, "Pulse propagation on multi-layered circuit level interconnects," *J. of E. M. Waves and Appl.*, vol. 4, pp. 229-245, Mar. 1990.
- [4] G. W. Slade, L. Carin, Q. Xu, S. E. Borchardt and K. J. Webb, "A study of fin-line leaky-wave antennas," *IEEE Trans. Antennas and Prop.*, vol. AP-38, pp. 411-413, Mar. 1990.
- [5] L. Carin and K. J. Webb, "Isolation effects in single and dual plane VLSI interconnects" *IEEE Trans. Microwave Theory Tech.*, vol. MTT-38, Apr. 1990.
- [6] L. Carin, "Efficient analysis of high-frequency two-dimensional effects in multiconductor printed interconnects" *IEEE Trans. Microwave Theory Tech.*, Jan. 1992.
- [7] L. Carin and N. K. Das, "Leaky-waves on broadside-coupled microstrip," *IEEE Trans. Microwave Theory Tech.*, Jan. 1992.
- [8] L. Carin and L. B. Felsen, "Design-oriented parametrization of truncated periodic gratings," *IEEE Microwave and Guided Wave Letts.*, vol. 2, pp. 367-369, Sept. 1992.
- [9] L. Carin and L. B. Felsen, "Efficient numerical-analytic analysis of ultra-wideband plane wave scattering from a collection of strips," *Int. J. Num. Model.*, vol. 6, pp. 3-17, Jan. 1993.
- [10] L. Carin and K. Agi, "Ultra-wideband transient scattering measurements using optoelectronically switched antennas," *IEEE Microwave Theory Tech.*, vol. 41, pp. 250-254, Feb. 1993.
- [11] D. Kralj and L. Carin, "Short-pulse scattering measurements from dielectric spheres using optoelectronically switched antennas," *Appl. Phys. Lett.*, vol. 62, pp. 1301-1303, Mar. 15, 1993.
- [12] L. Carin and L. B. Felsen, "Time-harmonic and transient scattering by finite periodic flat strip arrays: Hybrid (Ray)-(Floquet Mode)-(MOM) algorithm and its GTD interpretation," *IEEE Trans. Antennas Propagat.*, vol. 41, pp. 412-421, April 1993.
- [13] L. Carin, L. B. Felsen, and M. McClure, "Time-domain design-oriented parametrization of truncated periodic gratings," *IEEE Microwave and Guided Wave Letts.*, vol. 3, pp. 110-112, April 1993.

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- [15] L. Carin, D. R. Kralj, M. R. Melloch, and J. M. Woodall, "Characterization of planar antennas fabricated on GaAs epilayers containing As cluster for picosecond short-pulse applications," *IEEE Microwave and Guided Wave Letts.*, Sept. 1993.
- [16] L.B. Felsen and L. Carin, "Wave-oriented processing of scattering data," *Elect. Letters*, vol. 29, pp. 1930-1932, Oct. 28, 1993
- [17] L. Carin, L.B. Felsen, S.U. Pillai, D. Kralj, and W.C. Lee, "Dispersive modes in the time domain: analysis and time-frequency representation," *IEEE Microwave and Guided Wave Letters*, vol. 4., pp. 23-25, Jan. 1994.
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- [23] A. Sullivan and L. Carin, "Scattering by 2-D strips using an asymptotic hybrid (method of moments)-(physical optics) technique," *Microwave and Optical Technology Letts.*, Aug. 20, 1994.
- [24] M. McClure, D.R. Kralj, T.-T. Hsu, L. Carin and L. B. Felsen, "Frequency domain wave-oriented data processing for scattering by nonuniform truncated gratings" *J. Optical Soc. America A*, vol. 11, pp. 2675-2684, Oct. 1994.
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two-dimensional photonic bandgap crystal: theory and experiment," *J. Appl. Phys.*, April 15, 1995.

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from a general three-dimensional dielectric target embedded in a multi-layered medium,” *Radio Science*, vol. 35, pp. 305-313, Mar.-Apr. 2000.

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