

1. Name: Thomas P. Weldon **Academic Rank:** Assoc. Professor

2. Degrees:

BSEE	Penn State	1979
MSEngSci	Penn State	1986
PhD EE	Penn State	1995

3. UNC Charlotte (number of years = 20)

- Associate Professor: 2002-present.
- Assistant Professor: 1995-2002.

4. Other related experience:

- President and Founder, MixSig Labs, Inc., 2002-2007.
- Research Fellow (summer), Naval Research Laboratory, 1999.
- Consultant, InterDigital Communications Corp., 1995-1998.
- Senior Engineer, BAE Systems (formerly American Electr. Labs.), 1984-1990.
- Project Engineer, Skyworks (formerly Alpha Industries), 1982-1984.
- Development Engineer, Motorola, 1979-1982.

5. Certifications or professional registrations: Professional Engineer, NC, Reg. No. 023548.

6. Current membership in professional organizations

- IEEE (Senior Member), IEEE Microwave & Antennas Societies, 1981 – present.

7. Honors and awards:

- UNC Charlotte College of Engineering Maxheim Faculty Fellowship, 2000.
- Tau Beta Pi Outstanding Professor, 1995-1996.

8. Institutional and professional service in the last five years:

- UNC Charlotte ECE Department Research Coordinator, 2011-2013.
- Past-Chair IEEE NC Council (voting ExCom member), 2014-2015.
- Chair IEEE NC Council, 2012-2013.
- Vice-Chair IEEE NC Council, 2009-2011.
- IEEE Antennas & Prop. Society APS/URSI Int. Conference Session Chair, 2013.
- UNC Charlotte ECE Dept. Review Committee, 2004-2011, 2012-2013, 2015-2016.
- UNC Charlotte ECE Dept. Faculty Search Committee, 2014-2016
- IEEE Charlotte Section Newsletter Editor, 2010-2014.

9. Principal publications of last five years:

- Thomas P. Weldon, John M. C. Covington III, Kathryn L. Smith, and Ryan S. Adams, “A Two-Port Digital Discrete-Time Non-Foster Circuit Designed for Negative Capacitance,” Ninth International Congress on Advanced Electromagnetic Materials in Microwaves and Optics – Metamaterials 2015, Oxford, UK, Sep. 7-10, 2015.
- Thomas P. Weldon and Ryan S. Adams, “Digital Discrete-Time Non-Foster Approach to Broadband Fast-Wave Microstrip Lines,” Ninth Int. Congress on Adv. Electromagnetic Materials in Microw. and Optics – Metamaterials 2015, Oxford, UK, Sep. 7-10, 2015.
- Thomas P. Weldon, John M. C. Covington III, Kathryn L. Smith, and Ryan S. Adams, “Stability Conditions for a Digital Discrete-Time Non-Foster Circuit Element,” 2015

IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Vancouver, BC, Canada, July 19-25, 2015.

- Kathryn L. Smith, Thomas P. Weldon, and Ryan S. Adams, "Measurement, Simulation, and Theory of a Non-Foster Metamaterial Unit Cell with Parasitic Resistance," 2015 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Vancouver, BC, Canada, July 19-25, 2015.
- Thomas P. Weldon, John M. C. Covington III, Kathryn L. Smith, and Ryan S. Adams "Performance of Digital Discrete-Time Implementations of Non-Foster Circuit Elements," 2015 IEEE International Symposium on Circuits and Systems (ISCAS 2015), Lisbon, Portugal, May 24-27, 2015.
- Kathryn L. Smith, Ryan S. Adams, and Thomas P. Weldon, "A Novel Broadband Fractal Metamaterial Unit Cell," 2014 IEEE International Symposium on Antennas and Propag. and USNC-URSI Nat. Radio Science Meeting, Memphis, TN, July 6–12, 2014.
- Joshua W. Shehan, Ryan S. Adams, and Thomas P. Weldon, "Metamaterial Measurement in a Cylindrical Coaxial Fixture with Consideration for Inter-Element Coupling," 2014 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Memphis, TN, July 6–12, 2014.
- Sam L. Shue, Andrew R. Willis, and Thomas P. Weldon "HubVis: Software for Gravitational Lens Estimation and Visualization from Hubble Data," IEEE SoutheastCon 2014 Proceedings, pp. 1-4, Lexington, KY, Mar. 13-16, 2014.
- Thomas P. Weldon, Ryan S. Adams, and Joshua W. Shehan, "Stability of Embedded Non-Foster Metamaterials with Potentially Unstable Circuit Parameters," Seventh International Congress on Advanced Electromagnetic Materials in Microwaves and Optics – Metamaterials 2013, Bordeaux, France, Sept. 16-19, 2013.
- Joshua W. Shehan, John M. C. Covington III, Varun S. Kshatri, Thomas P. Weldon, Ryan S. Adams, "Permeability and Permittivity Extraction Issues For Non-Foster and Active Metamaterials," 2013 IEEE International Symposium on Antennas and Propag. and USNC-URSI Nat. Radio Science Meeting, Orlando, FL, July 7-13, 2013.
- Joshua W. Shehan, Ryan S. Adams, Thomas P. Weldon, "A Coaxial Test Fixture for Transmission/Reflection Measurements of Metamaterials," 2013 IEEE Int. Symp. on Antennas and Prop. (APS/URSI), Orlando, FL, July 7-13, 2013.
- Konrad Miehle, Thomas P. Weldon, Ryan S. Adams, and Kasra Daneshvar, "Wideband Negative Permeability Metamaterial with Non-Foster Compensation of Parasitic Capacitance," 2012 IEEE International Symposium on Antennas and Propagation and USNC-URSI National Radio Science Meeting, Chicago, IL, July 8-14, 2012.
- Thomas P. Weldon, Ryan S. Adams, Kasra Daneshvar, and Raghu K. Mulagada, "Metamaterials, Gamma-Ray Bursts, Quantum Gravity, and the Search for the Missing Half of the Maxwell Equations," 2011 IEEE International Microwave Symposium (IMS 2011), Baltimore, MD, June 2011.

10. Professional development activities in the last five years:

- IEEE SoutheastCon Conference -Technical Program: 2010-2014. (presenter)
- IEEE SoutheastCon Conference – R3 Region Meeting: 2010-2014. (leadership team)
- IEEE Ant. & Prop. Int. Conf. (APS/URSI) -Technical Program: 2012-2016. (presenter)
- IEEE Circ & Sys. Int. Conf. (ISCAS) -Technical Program: 2015. (presenter)
- Internat. Metamaterials Conf. (IEEE cosponsor) –Tech. Program: 2013, 2015. (presenter)