

# Paul Winniford

2206 Whiteoak Cir, Norman, Oklahoma 73071

pwinniford@ou.edu • (979)665-7358 • <http://arcc.ou.edu/ruyle/index.php/jessica-ruyle/>

## EDUCATION

University of Oklahoma, Norman, Oklahoma

- Doctor of Philosophy (Ph.D.) in Electrical Engineering Jan 2016 – Dec 2020
  - Adviser: Dr. J.E. Ruyle
  - Research areas: Antenna and transmission line structure design and analysis
- Master of Science (M.S.) in Electrical Engineering Jan 2014 – Dec 2015
  - Thesis: Analytical Matrix Method to Analyze Multiline Transmission Line Structures
  - Adviser: Dr. J.E. Ruyle
  - Research areas: Antenna and transmission line structure design and analysis
  - GPA: 3.57 / 4.0
- Bachelor of Science (B.S.) in Electrical Engineering Aug 2010 – Dec 2013
  - GPA: 3.91 / 4.00

## PUBLICATIONS

### JOURNALS

P. R. Winniford and J. E. Ruyle, “Analytical Tightly-Coupled Multiline Model of Microstrip Transmission Lines,” In preparation for submission to IEEE Trans. On Antennas and Propagation.

A. Moreno, J. E. Ruyle, P. R. Winniford, “Transmission Line Model of Tightly-Coupled and Radiating Serrated Parallel Plate Structures,” In preparation for submission to IEEE Trans. On Antennas and Propagation.

### CONFERENCES

P. R. Winniford and J. E. Ruyle, “Investigation of Broad and Multi-Band Characteristics of Tightly Coupled Microstrip Dipole Array,” in *Proc. 2014 IEEE/URSI International Symposium on Antennas and Propagation*, Memphis, TN July 2014.

P. R. Winniford and J. E. Ruyle, “Transmission Line Model of Multiple Tightly-Coupled Parallel Microstrip Lines,” in *Proc. 2015 IEEE/URSI International Symposium on Antennas and Propagation*, Vancouver, BC July 2015.

P. R. Winniford and J. E. Ruyle, “Expansion of Design Guidelines for a Tightly Coupled Microstrip Dipole Array,” in 2015 Allerton Antenna Symposium, Monticello, IL September 2015.

## EXPERIENCE

**Advanced Radar Research Center**, University of Oklahoma Norman, OK

Graduate Research Assistant, Jan 2014 – Present

- Focusing on antenna design and modelling of electromagnetic structures such as microstrip coupled dipole arrays and aperture coupled transmission lines
- Multiple conference and journal publications and presentations

**Xining International Academy**, Xining, China

Teacher Aug 2016 – Jun 2017

- Part time teacher at an international school
- High school Computer Office and Bible classes, Grades 1-12 PE

**L-3 Mustang Technology Group**, Plano, TX

Antenna Design Intern Summer 2014

- Worked on a small team to develop array synthesis code for radar applications
- Used CST to validate antenna array synthesis code

Radar Algorithms Intern Summer 2013

**Mangan Inc.**, Lake Jackson, TX

Process Automation Intern Summer 2011

## SKILLS

MatLab, CST, HFSS, FEKO, Spectrum Analyzer, Network Analyzer, Antenna Measurements, C

## AWARDS

- Eagle Scout
- President’s Honor Roll, College of Engineering Dean’s Honor Roll
- National Merit Scholar