# R. Wesley Henderson

Ph.D.

# **Objective Statement**

Electrical engineering doctoral graduate with demonstrated skills in Bayesian inference, signal processing, machine learning, and algorithm development. Seeking a position in signal processing or data science to build and analyze novel algorithms and models, to utilize state of the art machine learning methods to enable new applications, and to communicate effectively with colleagues and clients.

# **Skills**

Digital signal processing; parallel programming; Bayesian inference methods; machine learning; Markov chain Monte Carlo methods; Proficiency in Python, C, C++, and MATLAB

### Coursework

Machine learning, computer vision, image processing, algorithms, digital signal processing, information theory, integer and nonlinear optimization, detection theory

## **Awards**

Best poster award, MaxEnt 2013, Canberra, Australia, 2013

Robert Bradford Newman Student Medal for Merit in Architectural Acoustics, 2012

# R. Wesley Henderson

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# **Experience**

# The University of Mississippi

DeciBel Research project, Research Assistant

JANUARY 2017 - DECEMBER 2018, OXFORD, MS

- Developed ML-based radar-target classification algorithms
- Implemented radar-target classification algorithms in Python
- Tested algorithms on target data provided by sponsor
- Presented progress reports and final results to sponsor
- Wrote results portion of final report

#### BWAC Center, Administrative Assistant

AUGUST 2015 - DECEMBER 2018, OXFORD, MS

- Organized poster session at Spring 2018 BWAC meeting
- Designed and updated promotional BWAC brochure
- Maintained BWAC website

#### NCITEC Project, Research Assistant

AUGUST 2012 - DECEMBER 2013, OXFORD, MS

- Formulated Bayesian algorithms for intermodal transportation network design
- Deployed design algorithms in MATLAB
- Prepared papers and presented results at conferences

### **Education**

# The University of Mississippi / Ph.D. Electrical Engineering

AUGUST 2012 - MAY 2019, OXFORD, MS

Dissertation title: "Design and Analysis of Efficient Parallel Bayesian Model Comparison Algorithms." Advisor: Prof. Paul M. Goggans, GPA: 3.92

#### Rensselaer Polytechnic Institute / M.S. Architectural Acoustics

AUGUST 2011 - AUGUST 2012, TROY, NY

Thesis title: "Application of Bayesian Inference to Room-Acoustic Modal Analysis." Advisor: Prof. Ning Xiang. GPA: 3.85

#### Louisiana Tech University / B.S. Civil Engineering

SEPTEMBER 2007 - MAY 2011, RUSTON, LA

GPA: 3.71