

## Education

### Wright State University

2010-Present

- Status: Pursing Masters of Science in Computer Science at Wright State University
- Bachelor of Science in Computer Science (2015) w/ Minor in Statistics
- Current GPA: 3.83
- Relevant Courses to field of interest (Data Mining):

Network Science	Applied Stochastic Processes	Machine Learning	Computational Tools and Techniques for Data Analysis
Theoretical Statistics I	Information Theory	Foundations of Artificial Intelligence	Applied Statistics I & II

## Experience

### WSU Web and Complex Systems - Kno.e.sis

August 2015 – Present

Title: Graduate Research Assistant at the Web and Complex Systems, Wright State University

*Worked on:*

- Density-based clustering (R/Rcpp)
- Nonparametric Geospatial Point of Interest detection (R/C++)
- Spatio-temporal Social Network Model of spatial data (R)

### Oakland Ridge Institute for Science and Education

June 2014 – Present

Title: Civilian Research Associate at the Air Force Institute of Technology, Wright Patterson Air Force Base

*Worked on:*

- Computer Vision Project involving a parallelized Iterative Closest Point (ICP) algorithm (C++/CUDA)
- Parallelization of existing atmospheric absorption routines (MATLAB MEX/OpenCL)
- Modeling web navigation patterns using hierarchical Markov Models (R/MATLAB)
- Web interface to viewing 3D models (WebGL/JavaScript [+ HTML/CSS])

*Published:*

J. Robinson, M. Piekenbrock, L. Burchett, et. al. Parallelized Iterative Closest Point for Autonomous Aerial Refueling. In International Symposium on Visual Computing (pp. 593-602). Springer International Publishing. (2016, December)

### WSU Web and Complex Systems - Kno.e.sis

August 2015 – December 2015

Title: Undergraduate Research Assistant at the Web and Complex Systems, Wright State University

*Worked on:*

- Dynamic Geospatial analysis of wide-area motion imagery (R/Python/Java)

*Published:*

Maurice, Matthew, Matthew Piekenbrock, and Derek Doran. "WAMINet: An Open Source Library for Dynamic Geospace Analysis Using WAMI." Multimedia (ISM), 2015 IEEE International Symposium on. IEEE, 2015.

### Southwestern Ohio Council for Higher Education

December 2013 – June 2014

Title: Civilian Research Assistant at the Air Force Institute of Technology, Wright Patterson Air Force Base

*Worked on:*

- Dynamic of Nonlinear Optimization algorithm to C89 implementation (MATLAB/C)
- Search engine/web application for the Ozone Widget Framework (JavaScript/PHP)
- Implementation of unsplittable flow approximation algorithm (C++/Python)
- Conversion tool from Oracle's Abstract Data Type to XMLType in Oracle's Enterprise DBMS

## Miscellaneous

- National Model United Nations Conference 2014: Outstanding Position Paper
- National Model United Nations Conference 2013: Outstanding Delegation (Individual delegation and team)