

# William Zachary Horton

📞 765-490-3885 • ✉ wz.horton@gmail.com  
www.linkedin.com/in/wzhorton • wzhorton.github.io/portfolio

## Education

### Brigham Young University

*Master of Science - MS, Statistics (Integrated MS/BS)*

- Overall GPA: 4.0
- Department Scholarships: Fall 2017 - Winter 2019

**Aug. 2017 - Apr. 2019**

*Provo, UT*

### Brigham Young University

*Bachelor of Science - BS, Actuarial Science*

- Overall GPA: 3.94, Major GPA: 4.0
- Minor: Mathematics
- Dean's List: Fall 2015 - Winter 2018
- University Scholarships: Summer 2016 - Winter 2017
- Elrod C. Leany Scholarship: Fall 2016 - Winter 2017

**Jan. 2015 - Apr. 2019**

*Provo, UT*

## Master's Thesis

**Title:** *Template Priors in Bayesian Curve Registration*

**Advisors:** Garritt L. Page, C. Shane Reese

**Description:** In curve registration, it is common that expert information is available regarding likely location of certain curve features. We propose a method that coherently includes this information in a Gaussian process prior that is embedded within a hierarchical model. We compare this method to other landmark matching techniques and find that it performs better when the number of curve features is relatively small.

**Publication:** 85% Complete. Intended submission to Technometrics.

## Relevant Experience

### Research Assistant

*BYU Statistics Department*

- Research focused on functional data analysis and curve clustering
- Studied Bayesian implementations of DPMMs and curve registration
- Applications focused on injury classification and supernova identification
- Won second place in the Three Minute Thesis (3MT) competition at the college level
- Collaborated with BYU Exercise Science Department (Dr. Matthew Seeley)
- Presented in student research conferences: BYU 2016-2018, SUU 2018

**Sept. 2016–Current**

*Provo, Utah*

### Teaching Assistant – Graduate

*BYU Statistics Department*

- Teaching Assistant for two graduate level courses.
- Duties included holding regular office hours and grading assignments

**Aug. 2018–Current**

*Provo, Utah*

### Actuarial Intern

*Aon*

- Interned in Health and Benefits for 14 weeks
- Conducted detailed accuracy checks for coworkers
- Acquired working knowledge of current health insurance practices
- Led the transfer of a large pricing model to Aon's web-based software

**May. 2017–Aug. 2017**

*Denver, Colorado*

### Course Assistant: Introductory Statistics Online

*BYU Statistics Department/BYU Independent Study*

- Headed the launch of a hybridized online introductory statistics class
- Chosen for my experience in online teaching with BYU Independent Study
- Trained 6 other TA's on how to conduct virtual lab sessions
- Reviewed new course material for accuracy and clarity

**Aug. 2016–Dec. 2016**

*Provo, Utah*