

## Paul Gustafson

pgustafs@math.tamu.edu

## Education

### PhD candidate

Fall 2013 - Present

Texas A&M University, Math Department

- Advisor: Eric Rowell
- Field of study: Mapping class group representations from TQFTs

### Bachelor of Science in Mathematics

Spring 2013

Texas A&M University

## Publications and Preprints

Paul Gustafson. “Finiteness for Mapping Class Group Representations from Twisted Dijkgraaf-Witten Theory”, arXiv:1610.06069, 2016.

Ronald Fernandes; Biyan Li; Kalyan Vadakkeveedu; Ajay Verma; Paul Gustafson, et al. “Agent-based analysis of trustworthiness in wireless sensor networks”, Proc. SPIE 8407, Multisensor, Multisource Information Fusion: Architectures, Algorithms, and Applications 2012, 84070W (May 1, 2012); doi:10.1117/12.920781.

Gustafson, Paul; Savir, Nathan; Spears, Ely (2006-11-14), “A Characterization of Refinable Rational Functions”, American Journal of Undergraduate Research 5 (3): 11-20.

## Work Experience

### Teaching Assistant

Fall 2013 - Present

Texas A&M University, Math Department

- Instructor of record for 60-student Calculus class
- Grader for Algebraic Topology I
- Led Calculus recitations and MATLAB labs

### Programmer Analyst

Fall 2008, Summer 2009, Fall 2011 - Spring 2012

Knowledge Based Systems, Inc.

- Programmed Wireless Sensor Network simulator in Java and NetLogo
- Authored user manuals and other documentation

### Counselor

Summer 2009, Summer 2010

SMaRT Camp, Texas A&M University

- Mentored mathematically-inclined high schoolers in elementary number theory

## **Github Repository**

**stringnet**

December 2016 - Present

- A Haskell library for quantum mapping class group representations

## **Technical Skills**

### **Programming Languages**

Java (4 years of experience), C, Haskell, Coq, Agda, MATLAB, Python, NetLogo

### **Miscellaneous**

LaTeX, Git, HTML