October 2017

# **Mark Agrios**

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#### **Research Interests:**

Mathematical modeling including dynamic systems, biophysics, mathematical and computational neuroscience. Algebraic topology, topological data analysis, homological algebra, simplicial homology.

#### **Positions:**

Research Technologist at the Miri Lab, Northwestern University [https://mirilab.org]

- August 2019 - present

### **Academic Training:**

B.S. Mathematics. College of William & Mary, Spring 2019

B.S. Neuroscience. College of William & Mary, Spring 2019

## **Leadership Positions:**

Pi Mu Epsilon Math honors society president at William & Mary

- Fall 2018 - Spring 2019

#### **Research Experience:**

EXTREEMS-QED program summer 2017

William & Mary honors fellow summer 2018

Simplicial Homology and Burst-Synchronizing Neural Networks (in progress)
Advisors: Prof Sarah Day (department of mathematics) Prof Drew LaMar (department of biology)

#### **Conferences Presented**

**SUMS at James Madison University** 

EXTREEMS-QED Summer research colloquium July 2017

JMM in San Diego January 2018

SIAM-SEAS at UNC (invited) March 2018

EXTREEMS-QED Summer research colloquium (invited)

June 2018

SIAM at the University of Delaware

September 2018

# Conferences Attended

BAMM at VCU May 2017

# **Computational Experience** [https://github.com/markagrios]

Python C, C++ HTML, CSS, Javascript

Matlah

Matlab