# Amelia Tarren

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## **EDUCATION**

University of Vermont, Burlington VT

MS in Mathematics, January 2019-Expected May 2020

Hampshire College, Amherst, MA

BA in Engineering and Hydrological Sciences, May 2015

#### PROFESSIONAL EXPERIENCE

Mathematics Lecturer, UVM Department of Mathematics teaching assistantship January 2019-Present

• Lead instructor for Calculus, and Linear Algebra sections by delivering instruction, evaluation and technical support to students.

## Research Coordinator, UVM, NOAA Lake Champlain Sea Grant Program Assistant

January 2019- December 2019 August 2016-December 2018

- Collaborate with international, federal, state and private agencies on water quality research
- Coordinate outreach programming throughout the Lake Champlain Basin
- Oversee intern staff and maintain Lake Champlain Sea Grant outreach curriculum, and laboratory

## Research Assistant, UMASS Physics Department

December 2015 - Present

- Write data analysis macros based on simulated proton collision data from the LHC ATLAS Detector
- Perform research using ROOT software platform on a Unix computer cluster
- · Present associated background information and analysis reports to research team

## Education Consultant, Walker Tutoring

August 2016 - March 2017

Designed and taught math, chemistry and biological science courses up to 200-level

#### RESEARCH EXPERIENCE

- Mathematics: Applications of functional analysis
- Data Science: Election prediction algorithms using the Vermont Advance Computing Cluster (VACC)
- Experimental Particle Physics: Muon Spectrometer data analysis, UMASS Physics Department

#### **SKILLS**

- C++, MATLAB, Python, LaTex, Mac, Windows OS, MS Office Suite, Website Development
- Selected Coursework: Complex Network Analysis, Numerical Analysis, Chaos and Dynamical Systems

#### **HONORS AND AWARDS**

- RSENR Dean's Merit Award (2017, 2018)
- Ingenuity Award, Hampshire College (2015)
- Jane and Michael Bardsley Academic Achievement Award, Greenfield Community College (2011)
- Human Relations Award, National Conference for Community and Justice (2010)