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# Amelia Tarren

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## EDUCATION

**University of Vermont**, Burlington VT

Masters Candidate in Applied Mathematics

**Hampshire College**, Amherst, MA

Bachelor of Arts Degree, 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

**January 2019- December 2019**

**Program Assistant**

**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

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