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

**Greenfield Community College**, Greenfield, MA

Associate of Environmental Studies Degree, May 2011

**PROFESSIONAL EXPERIENCE**

**Teaching Assistant—**UVM Department of Mathematics **January 2019-Present**

* Assist lead instructors with Linear Algebra sections by delivering instruction, evaluation and technical support to students

**Program Assistant—**UVM, NOAA Lake Champlain Sea Grant  **August 2016-December 2018**

**Interim Research Coordinator January 2018-June 2018**

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

# **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

**Private Tutor—**Walker Tutoring **August 2016 - March 2017**

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

# **RESEARCH EXPERIENCE**

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

**SKILLS**

* C++
* ArcGIS 10.5
* MATLAB, Python, R, LaTex
* Mac, Windows OS, MS Office Suite
* Relevant 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)
* 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)