

# Tyler S. Anderson

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[Online Portfolio](#)  
[LinkedIn](#)

## EDUCATION

### M.S. Candidate in GIScience

Clark University, Worcester, MA  
4.0 GPA

Aug 1<sup>st</sup>, 2019

### B.A. in Environmental Science

Clark University, Worcester, MA  
magna cum laude: 3.78 GPA

May 2018

## SKILLS

<i>Technical Skills</i>	<i>Programming Skills</i>	<i>Expertise</i>
ArcGIS, QGIS, Erdas IMAGINE, TerrSet (IDRISI), GRASS, GeoDa, CLASlite, ACOLITE	Python, R, GDAL, Google EarthEngine, Markdown, JavaScript, Anaconda, GitHub	Remote Sensing, Raster Analytics, Spatial Statistics, Image Segmentation, Time Series Analysis, Cartography, Field Methods, Forest Ecology

## RELATED EXPERIENCE

### Teaching Assistant: Python Programming for GIS

Jan – May 2019

### Teaching Assistant: Field Methods

Aug – Dec 2018

Clark University, Worcester, MA

- Led weekly student labs on topics such as Python, ArcPy, Google EarthEngine, Field Methods, Forest Ecology, and more.
- Held weekly office hours for student assistance.
- Graded labs and recorded student progress.

### NASA DEVELOP Research Member

Jun – Aug 2018

NASA Ames Research Center, Moffett Field, CA

- Investigated change in water quality in US Virgin Islands after 2017 Hurricane season.
- Extracted coastal water quality from Landsat and Sentinel-2 imagery for baseline period before and months after hurricanes Irma and Maria.
- Filtered and processed satellite derived water quality using ACOLITE and R.
- Created coral vulnerability index from water quality.
- Presented research to NASA employees and project collaborators.

### GIS Help Desk Assistant

Jan – May 2018

Clark University, Worcester, MA

- Provided free, one-on-one tutoring and guidance to students for GIS.
- Point of contact for GIS troubleshooting for students in GIS classes.
- Provided guidance and support on GIS concepts and issues with software.

### NOAA Fellowship

Jun – Aug 2017

National Oceanic and Atmospheric Administration, Silver Spring, MD

- Investigated the relationship between satellite-derived bathymetry and turbidity.
- Used 300 m MODIS satellite-derived bathymetry (SBD) and Kd\_Rhos (proxy for turbidity) to understand the relationship between SBD and turbidity.
- LiDAR based bathymetry used to validate SBD and understand Kd\_Rhos (turbidity) effect.
- Presented updates/results at weekly team meetings and final internship presentation.

## **HERO Fellowship**

May – Jul 2016

*Clark University, Worcester, MA*

- Investigated health of juvenile trees planted after tree removal program due to invasive Asian Longhorn Beetle (ALB) in Worcester, MA.
- Field work collecting data on juvenile tree status, vigor, and health across the City of Worcester.
- Data analysis to investigate survivorship based on factors such as: species, use, location of property, ownership, and more.

## **ACADEMIC EXPERIENCE & PRESENTATIONS**

### **Master's Thesis** for M.S. in GIScience

Title: Gypsy Moth from Above: Using Landsat Sentinel-2 Fusion Products to Track the Impact of Gypsy Moth in Southern New England

### **AAG Annual Meeting 2019**, Washington, DC: Poster Presentation

Title: Gypsy Moth from Above: Tracking the Impact of Gypsy Moth in New England

### **Honors Thesis** for B.A. in Environmental Science

Title: Trends in Forest Cover: Semi-Automated Classification of Forest Cover in Massachusetts for 2015

### **AAG Annual Meeting 2018**, New Orleans, LA: Poster Presentation

Title: Trends in Forest Cover in Massachusetts: Classification for 2015

## **AWARDS, HONORS, AND MEMBERSHIPS**

- 2018 Environmental Science Research Excellence Award - Clark University
- Highest Honors in Environmental Science for Undergraduate Honors Thesis
- Clark University Dean's List – Fall 2014 – Spring 2018
- Gamma Theta Upsilon (GTU) – Geographic Honor Society
- American Association of Geographers (AAG)
- American Society of Photogrammetry and Remote Sensing (ASPRS)