Tyler S. Anderson

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EDUCATION

M.S. in GIScience Aug 2019
Clark University, Worcester, MA
4.0 GPA

B.A. in Environmental Science May 2018
Clark University, Worcester, MA
magna cum laude: 3.78 GPA

SKILLS

Technical Skills	*Programming Skills*	*Expertise*
QGIS, ArcGIS, ERDAS IMAGINE, TerrSet (IDRISI), GRASS, OrfeoToolbox, CLASlite, ACOLITE	Python, GDAL, Google EarthEngine, JavaScript, Markdown	Remote Sensing, Image Segmentation, Time Series Analysis, Costal Ecology, Water Resources

RELATED EXPERIENCE

Remote Sensing Scientist Aug 2019 – Present
Cloud to Street, PBC, Brooklyn, NY

- Deploy remotely sensed flood algorithms for MODIS, Landsat, Sentinel-1, Sentinel-2 in response to floods in project areas.
- Deploy impact metrics for remotely sensed flood maps to quantify population, cropland, and infrastructure impacts.
- Develop and automate improvements to high resolution flood maps, impact metrics, and report generation.

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, and Forest Ecology.
- Held weekly office hours for students, graded labs, recorded progress.

NASA DEVELOP Participant 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 before hurricane season, as well as for months after.
- Filtered and processed satellite derived water quality using ACOLITE and R.
- Created coral vulnerability index from water quality level and persistence.

GIS Help Desk Assistant Jan – May 2018
Clark University, Worcester, MA

- Provided free, one-on-on tutoring and guidance for students in GIS courses.
- Provided guidance on support on GIS concepts and software.

NOAA Fellowship Jun – Aug 2017

National Oceanic and Atmospheric Administration, Silver Spring, MD

- Investigated the relationship between satellite-derived bathymetry and turbidity.
- Used 300m 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 effect of turbidity.
- 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)