

## Abigail Stone

stone.abigail@gmail.com · (603)738-5333  
abigailstone.github.io

EDUCATION	<b>Middlebury College</b> , Middlebury, VT	expected February 2021
	Bachelor of Arts, Computer Science Thesis: <i>Improved Diffusion-Based Despeckling of Multitemporal Synthetic Aperture Radar Imagery</i> Relevant coursework: Remote Sensing in Geoscience, Algorithms and Complexity, Intro. to Data Science, Computational Complexity, Computer Vision, Fourier Analysis and Signal Processing, Linear Algebra, Multivariable Calculus, Differential Equations.	
	<b>Middlebury C.V. Starr School Abroad</b> , Poitiers, France	Spring 2019
	Completed third-year Computer Science coursework in French at l'Université de Poitiers.	
EXPERIENCE	<b>Research Assistant - Middlebury College</b>	June 2020 - August 2020
	<b>Department of Computer Science</b>	Middlebury, VT
	Collaborated with two other students to study the applicability of synthetic aperture radar imagery to the evaluation of pavement quality on U.S. road networks. Evaluated several approaches to radar image pre-processing and developed a complete data analysis pipeline for comparison with ground-truth road quality data. Advised by Professor Andrea Vaccari.	
	<b>Wetlands Mapping Intern</b>	June 2019 - August 2019
	<b>Vermont Dept. of Environmental Conservation</b>	Montpelier, VT
	Analyzed LiDAR and satellite imagery to delineate and classify wetlands. Added 42,000 acres of wetland mapping to the online Natural Resources Atlas. Wrote a set of Python and SQL scripts to aid in data management and conversion of future datasets. Assisted with regulatory wetland site visits and bioassessment surveys.	
	<b>Research Assistant - Université de Poitiers</b>	April 2019 - June 2019
	<b>LIAS Lab</b>	Poitiers, France
	Designed and implemented a prototype system of low-cost and low-power gateway devices and end-nodes using the LoRaWAN protocol. Evaluated geolocation accuracy and data reliability. Wrote a complete technical report in French.	
	<b>Computer Science Grader</b>	February 2018 - May 2020
	<b>Middlebury College</b>	Middlebury, VT
	Graded and provided written feedback for students' weekly homework and lab assignments in Introduction to Computing (Spring 2018, Fall 2019) and Data Structures (Fall 2018, Spring 2020)	
	<b>Backcountry Hut Naturalist</b>	Summers 2017 and 2018
	<b>Appalachian Mountain Club</b>	Gorham, NH
	Independently developed and presented daily natural history and environmental education lectures and interactive programming to overnight visitors of all ages. Collected and reported phenology data for a long term ecological monitoring project.	
SKILLS	<b>Programming Languages:</b> Python, JavaScript, R, Java, C, HTML/CSS, SQL. <b>Software and Tools:</b> ArcGIS, QGIS, GDAL, Git, RStudio, R Shiny, LaTeX, Google Earth Engine, Leaflet, D3, Jupyter, MATLAB, Oracle Database. <b>Foreign Languages:</b> French (fluent)	