

Abigail Stone

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EDUCATION	Middlebury College , Middlebury, VT	February 2021
	Bachelor of Arts, Computer Science, <i>magna cum laude</i> Thesis: <i>Speckle Noise Reduction for Multitemporal Synthetic Aperture Radar Imagery</i> Relevant coursework: Computer Vision, Fourier Analysis and Signal Processing, Networks, Databases, Data Science, Information Visualization, Linear Algebra, Multivariable Calculus, Differential Equations, Remote Sensing in Geoscience.	
	Middlebury C.V. Starr School Abroad , Poitiers, France	Spring 2019
	Completed third-year Computer Science coursework in French at l'Université de Poitiers.	
EXPERIENCE	Research Assistant - Middlebury College	June 2020 - August 2020
	Department of Computer Science	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.	
	Wetlands Mapping Intern	June 2019 - August 2019
	Vermont Dept. of Environmental Conservation	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 and documented a set of Python and SQL scripts to aid in data management and quality assurance of future datasets. Assisted with regulatory wetland site visits and bioassessment surveys.	
	Research Assistant - Université de Poitiers	April 2019 - June 2019
	LIAS Lab	Poitiers, France
	Designed and implemented a prototype IoT network of low-cost and low-power gateway devices and end-nodes using the LoRaWAN protocol. Configured an application server and evaluated geolocation accuracy and data reliability. Wrote a complete technical report in French.	
	Computer Science Grader	February 2018 - May 2020
	Middlebury College	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)	
	Backcountry Hut Naturalist	Summers 2017 and 2018
	Appalachian Mountain Club	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	Programming Languages: Python, R, JavaScript, C, HTML/CSS, SQL.	
	Software and Tools: OpenCV, ArcGIS, QGIS, GDAL/OGR, Matlab, Leaflet, D3.js, Git, LaTeX, Linux.	
	Foreign Languages: French (professional proficiency)	