
2016 Summer Internship Position ONLINE TRAIL MAPPING - VT/NH/ME

LOCATIONS

Middlebury (primary) with field work and travel required around Vermont, New Hampshire, and Maine

PROJECT DESCRIPTION

Easy access to centralized information is commonly cited as a barrier for people wanting to be more active outdoors. In order to increase public access to information about recreational trails, CCGIS has built several, web-based “trail finder” applications that allow users to search and display information, maps, photographs, weather reports, and user-submitted comments for an extensive and expanding database of people-powered trails in Vermont, New Hampshire, and Maine.

The summer Online Trail Mapping intern will work with CCGIS, its partners, and local trail managers and land owners to develop new trail postings that will be added to [Trail Finder](http://www.trailfinder.info) (www.trailfinder.info) and [Maine Trail Finder](http://www.mainetrailfinder.com) (www.mainetrailfinder.com). A sample trail posting on Trail Finder for the [Trail Around Middlebury](http://www.trailfinder.info/trails/trail/trail-around-middlebury-tam) (<http://www.trailfinder.info/trails/trail/trail-around-middlebury-tam>) shows the different types of information—spatial, textual, photographic—that comprise a complete trail posting.

The selected student intern will help to gather, edit, attribute, and upload spatial trail data (both routes and points of interest) using Geographic Information Systems (GIS). GIS data will primarily be provided by trail managing organizations. At times, the intern will need to collect trail data using hand-held GPS in the field. The intern will be responsible for the quality control of all GIS data, ensuring topological accuracy (e.g., GPS artifacts are removed, points fall along lines, lines connect at intersections) and assessing the accuracy of spatial data provided by partners.

The intern will also compile descriptive trail text, photos, and trail manager contact information. This information may be gathered from the trail manager staff, trail organizations’ websites, or from personal field work.

Both trail finder websites use ArcGIS plug-ins, QGIS software, and/or python scripts to export trail data into the correct format (.kml) for inclusion in the website. All content (spatial and otherwise) will be added to the trail finder websites using their respective Content Management Systems (CMS). The intern will be provided with training in the trail finder GIS data systems and export protocols as well as the CMS.

QUALIFICATIONS

The intern must have proficiency with ArcGIS 10.x software and using hand-held GPS units to gather and transfer data into GIS. Familiarity with QGIS software and basic python scripting are preferred but not required. The intern must be comfortable navigating the web and using online systems to support data upload/inclusion into the various trail finder websites' CMSs. CMS training will be provided.

The intern must be comfortable hiking alone over various terrains to collect trail data in the field, for up to 8 hours in a day. The intern must be able to travel independently to trail locations. A valid driver's license and access to a personal vehicle with insurance are therefore required. The opportunity and need to bike along trails may also arise.

Candidates should be self-motivated, comfortable working independently, well-organized, able to communicate well with project partners, and capable of setting and meeting project goals. Strong attention to detail will help the intern successfully include information on the websites following current content standards. Individuals with a strong interest in recreational mapping, trail management, and learning more about the New England landscape will find this internship especially rewarding.

The intern must currently be enrolled at Middlebury College. The intern will have access to the Middlebury College Geography Department computer labs and Bill Hegman, the Middlebury College Geography Department GIS Specialist, will provide the primary technical support during the summer.

COMPENSATION

A stipend of \$3500 is available from Middlebury College, with an additional \$500 allotted for travel expenses. This stipend is based on 350 hours of work, or approximately 35 hours per week for 10 weeks. The intern will be responsible for their own room and board, on or off campus. Starting and ending dates are flexible but generally go from early June to mid August.

TO APPLY

Please send a cover letter (describing your interests and background) and résumé, as well as two references (name, relationship, email, phone number) **electronically** to:

Stephen Engle, Director (Midd '95) sengle@community-gis.org

Questions about this internship may be directed to CCGIS or Bill Hegman at bhegman@middlebury.edu.

Applications are due April 12th, 2016.

This internship is in memory of Professor Bob Churchill, the founder and director of the GIS program at Middlebury College, who trained more than 900 students in different aspects of GIS and cartography. Many of these students are now leaders in the field.