# Schuyler Williams

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# **Professional Summary**

A geographic expert with 4+ years experience in supervisory/management roles and GIS/computer programming development. Specializing in efficient communication solutions, application design and development, team coordination, and GIS analysis.

# Experience

## GIS Ecological Technician

Department of Forest and Wildlife Ecology, Madison, WI, 2015-2016

- Digitize and attribute land cover maps
- Responsible for updating progress map
- Create point and line features on georeferenced map images
- Work as a team to achieve efficiency and deadline goals

## GIS Lab Manager

Department of Forest and Wildlife Ecology, Madison, WI, 2016-2017

- Communicating and resolving issues
- Oversight and training of all new hires
- Developed procedure for quality control of completed work
- Delegate and coordinate responsibilities
- Run monthly meetings
- Maintain lab website and develop mapping applications

### **GIS Developer**

UW - Sea Grant, Madison, WI, 2016-2017

- Collaborate with Wisconsin State Cartographers Office
- Develop web mapping application
- Update existing application as well as design new functionality
- Design wireframes and implement new user experiences
- Manage project framework and design

#### **GIS Analyst**

Continental Mapping Consultants, Sun Prairie, WI, 2017-Current

- Develop python scripts which increased workflow speed by 700%
- Helped develop and revise geoprocessing workflow
- Developed tool to automatically handle 80% of a specific workflow task
- Invited to join QC team
- Analyze aerial imagery and perform geographic analysis
- Obtained Secret Clearance

# Projects

## **Local Event Application**

I am currently developing an local event application. The web app uses crowd-sourced GIS techniques integrated with a NoSQL database for real-time updates for events created by users.

## **Twitter Crisis Map**

I developed a web mapping application that pulls geotagged tweets from the Twitter API based on specific code words. The results of those tweets are then stored in a JSON file, which is referenced by an online map. With this application, I was able to see geotagged tweets pop up across the world during Hurricane Sandy, while searching for the code words, "hurricane" and "sandy".

#### Interactive Recreational Database

I am currently developing an interactive recreational database; that is, an online portal that allows access to all kinds of recreational activities and recreational areas across the country. I have currently started testing the interface in Wisconsin, and am switching the database from an SQL framework to a NoSQL framework for efficiency and speed.

#### **Crowd-sourced Disease Tracker**

I have developed a crowd-sourced disease tracker, using open-source GIS libraries and an SQL database. The initial project was for a class, however I believe that with the right integration the application could be very useful for professionals in the field. A user is able to report a case of a disease from anywhere in the world, which is then viewed in real-time in the application.

#### Education

## Bachelors of Science - GIS / Cartography and Geography

University of Wisconsin - Madison • Madison, WI • 2017

### Skills

SQL · NoSQL • PHP · Python • HTML/HTML5 · CSS/CSS3 • Javascript · Java • AJAX · ArcPy • GDAL · OGR • Leaflet · Openlayers • Mapbox · Esri ArcGIS • QGIS · Envi • PostgreSQL · Geoserver • Mapserver · Google Earth • Firebase · Adobe Illustrator • Adobe Photoshop · Adobe Acrobat • GIMP · MS Office