The AAG-Esri GeoMentors Program




Increasing GIS and Geography in K-12 Education

AAG esri ConnectED INITIATIVE

Esri ConnectED Initiative

ConnectED INITIATIVE

In June 2013, President Obama announced the ConnectED initiative, designed to enrich K-12 education for every student in America. ConnectED empowers teachers with the best technology and the training to make the most of it, and empowers students through individualized learning and rich, digital content.

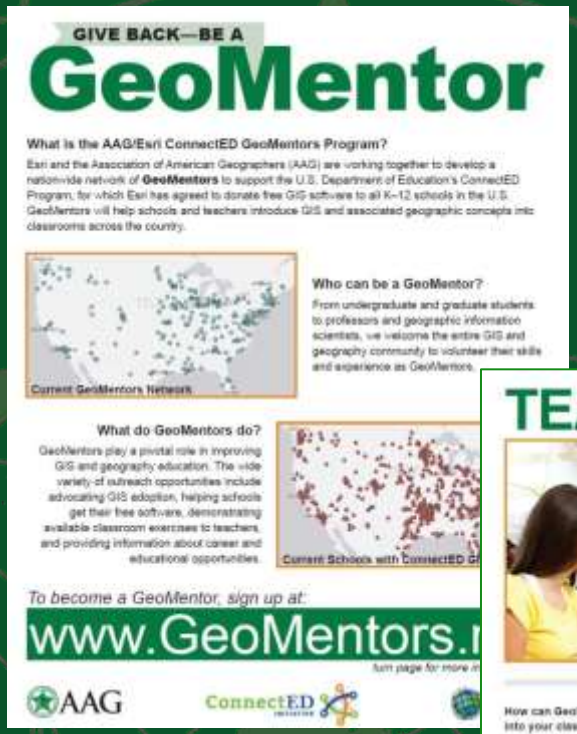
esri ArcGIS

- Esri is donating *free* ArcGIS Online organization accounts to *every* K-12 school in the U.S

- Goal for adoption of ArcGIS Online at 25,000 K-12 schools and software access to one million school users.

AAG-Esri GeoMentors Program

- *Organize*
- *Facilitate*
- *Motivate*


GIVE BACK—BE A

GeoMentor

What is the AAG/Esri ConnectED GeoMentors Program?

Esri and the Association of American Geographers (AAG) are working together to develop a nationwide network of **GeoMentors** to support the U.S. Department of Education's ConnectED Program, for which Esri has agreed to donate free GIS software to all K–12 schools in the U.S. GeoMentors will help schools and teachers introduce GIS and associated geographic concepts into classrooms across the country.

Current GeoMentors Network

Who can be a GeoMentor?

From undergraduate and graduate students to professors and geographic information scientists, we welcome the entire GIS and geography community to volunteer their skills and experience as GeoMentors.

What do GeoMentors do?

GeoMentors play a pivotal role in improving GIS and geography education. The wide variety of outreach opportunities include advocating GIS adoption, helping schools get their free software, demonstrating available classroom exercises to teachers, and providing information about career and educational opportunities.

Current Schools with ConnectED GI

To become a GeoMentor, sign up at:

www.GeoMentors.n

turn page for more in

AAG ConnectED


TEACHERS: Partner with a GIS GeoMentor

Esri is donating free access to its ArcGIS Online geographic information systems (GIS) software to all U.S. K–12 schools to introduce geospatial technology and geographic concepts to students. The Association of American Geographers (AAG) is working with Esri to build a nationwide network of GeoMentors to assist educators with using their free accounts with students, who can map and analyze data with the same software used by government and businesses.

How can GeoMentors help you bring GIS into your classroom?

GeoMentors are knowledgeable GIS users ready to adapt to the unique needs of each educator, school, and student group. They can help set up your free software account, demonstrate available classroom exercises, provide information on career opportunities, or help develop new activities based on your particular student audience.

What resources are available for teachers?

The GeoMentors program maintains online maps and databases for collaborators to connect with each other, a curated collection of ArcGIS Online educational resources and curriculum materials for different subjects and grade levels, as well as several online groups and social media streams for community engagement and interaction.

Current GeoMentors Network

Collaborate with a GeoMentor; visit **www.GeoMentors.net**

For questions or more information, contact program staff at **geomentors@aag.org**.

AAG ConnectED esri

www.geomentors.net

Who can be a GeoMentor?

From undergraduate and graduate students to professors and geographic information scientists, we welcome the entire GIS community to volunteer their skills and experience as GeoMentors.

Advanced GIS skills are ***not*** required to be a great asset to K-12 classrooms.

Who are our GeoMentors?

"Do you have any degrees or certificates in geography and/or GIS&T?"

Response	Count	% of GMs
No Degree Indicated	167	22.5%
Associate's Degree	24	3.2%
Undergraduate Minor	46	6.2%
Undergraduate Level Certificate	58	7.8%
Undergraduate Major	242	32.6%
Graduate Level Certificate	161	21.7%
Master's Degree	212	28.5%
PhD	71	9.6%

Who are our GeoMentors?

- I am a **biologist** with the **National Park Service** and use ArcGIS regularly.
- I'm an **AP Human Geography teacher** integrating some ArcGIS online into lessons.
- I am a **software architect and developer** in the GIS field for a major corporation.
- I am a **graduate student** in an Applied Geography and Geospatial program looking to volunteer and help educators.
- I am an **urban planner**, currently employed by the real estate department of a local government.
- I am a **certified health educator** and have a certification in GIS.

What do GeoMentors do?

Advocate GIS adoption and help schools and groups set up their free ArcGIS Online accounts

Demonstrate available GIS classroom exercises to educators

Share information about careers in GIS

Assist teachers and group leaders with tailoring GIS activities for their specific subject, grade, and/or project.

Work with your local community schools or with schools and educators across the US!

What do GeoMentors do?

- "My son's school just registered for their ConnectED account yesterday. The principal and IT specialist are both excited as is his Kindergarten teacher. "
- "I'm visiting a middle school in Riverside, CA. They're learning about earthquakes and architecture so I'll demonstrate how 3D GIS and ArcGIS Online can be used to model such events."
- "I have been asked to present at the Kansas Association of Middle Level Educators on teaching with maps and GIS."
- "I reached out to my daughter's 4th grade Challenge program teacher. I shared a bunch of resources with her and inadvertently caused her to change her entire lesson plan to incorporate GIS. (Oops). "

How do I become a GeoMentor?

Register as a GeoMentor or Seek a GeoMentor

For more information about the GeoMentor program, including who can be a GeoMentor, visit the About page. **Previous experience with ArcGIS Online is not required**; we have many training resources available to help you quickly gain basic skills that will make you an asset to K-12 classrooms.

GeoMentors

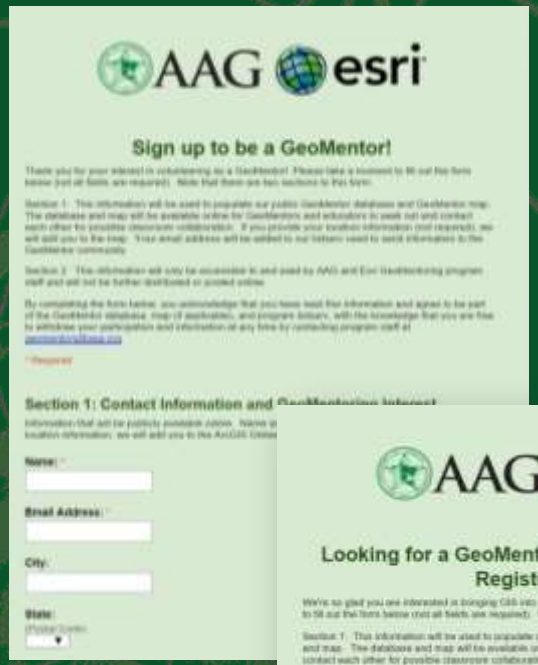
Would you like to be a GeoMentor?

Register here

Educators

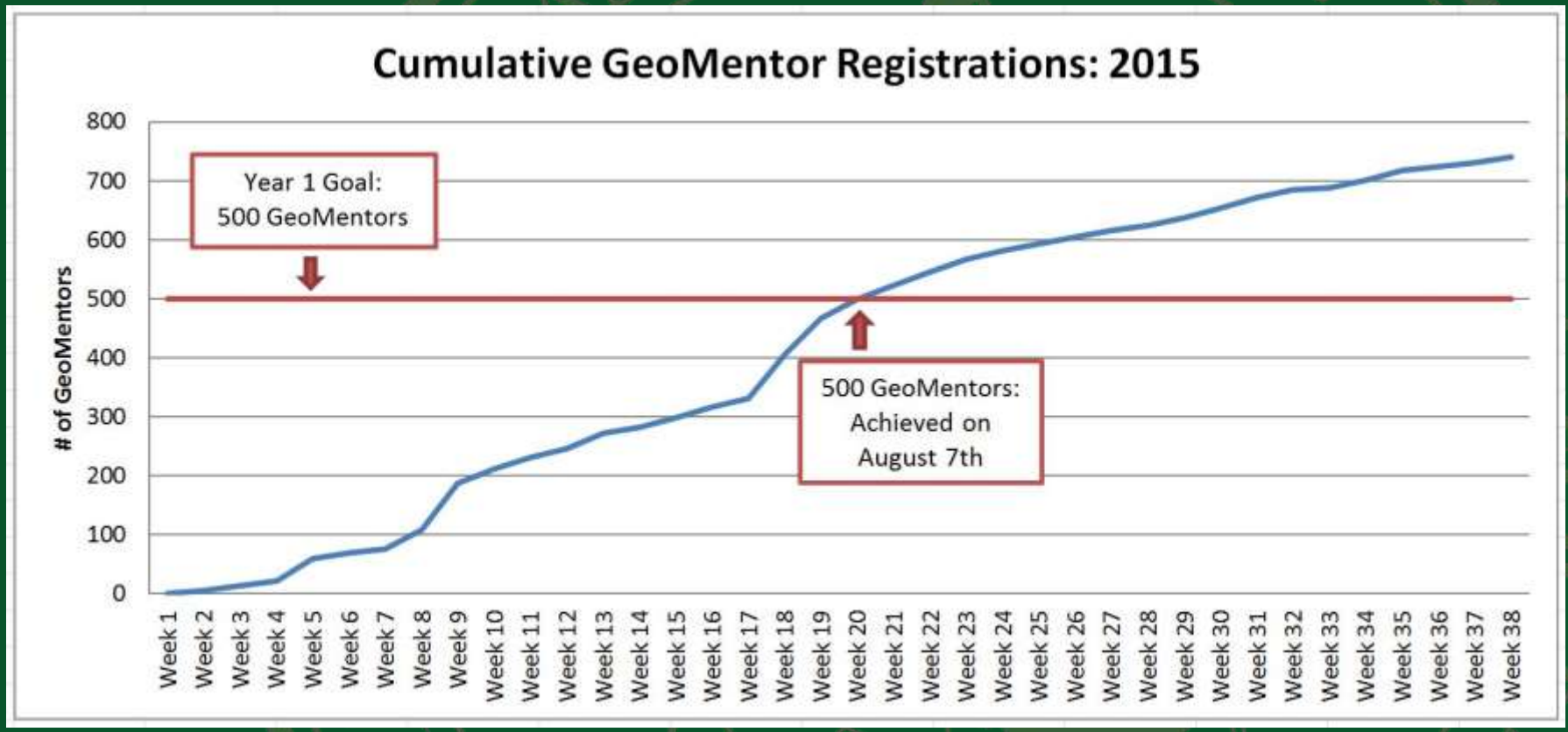
Are you looking for a GeoMentor?

Register here



www.geomentors.net/participate

GeoMentor Registrations: 2015

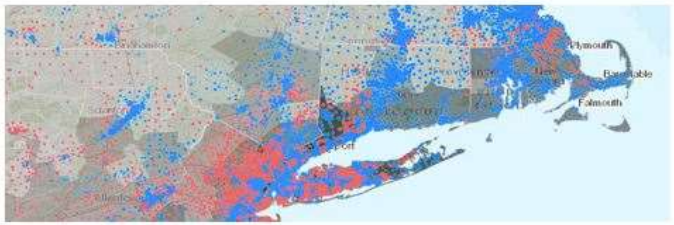


Current GeoMentors Map

1,000+ strong and growing!

Join the network - Sign up today!

Connect with a Collaborator



GeoMentor Guidelines for Contacting Potential Collaborators

Now that you have signed up as a GeoMentor and familiarized yourself with the program's goals and mentor training materials, the next step is to connect with a school or teacher for
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teachers or schools
- GeoMentors should

Recruit new schools to participate in the Esri ConnectED program

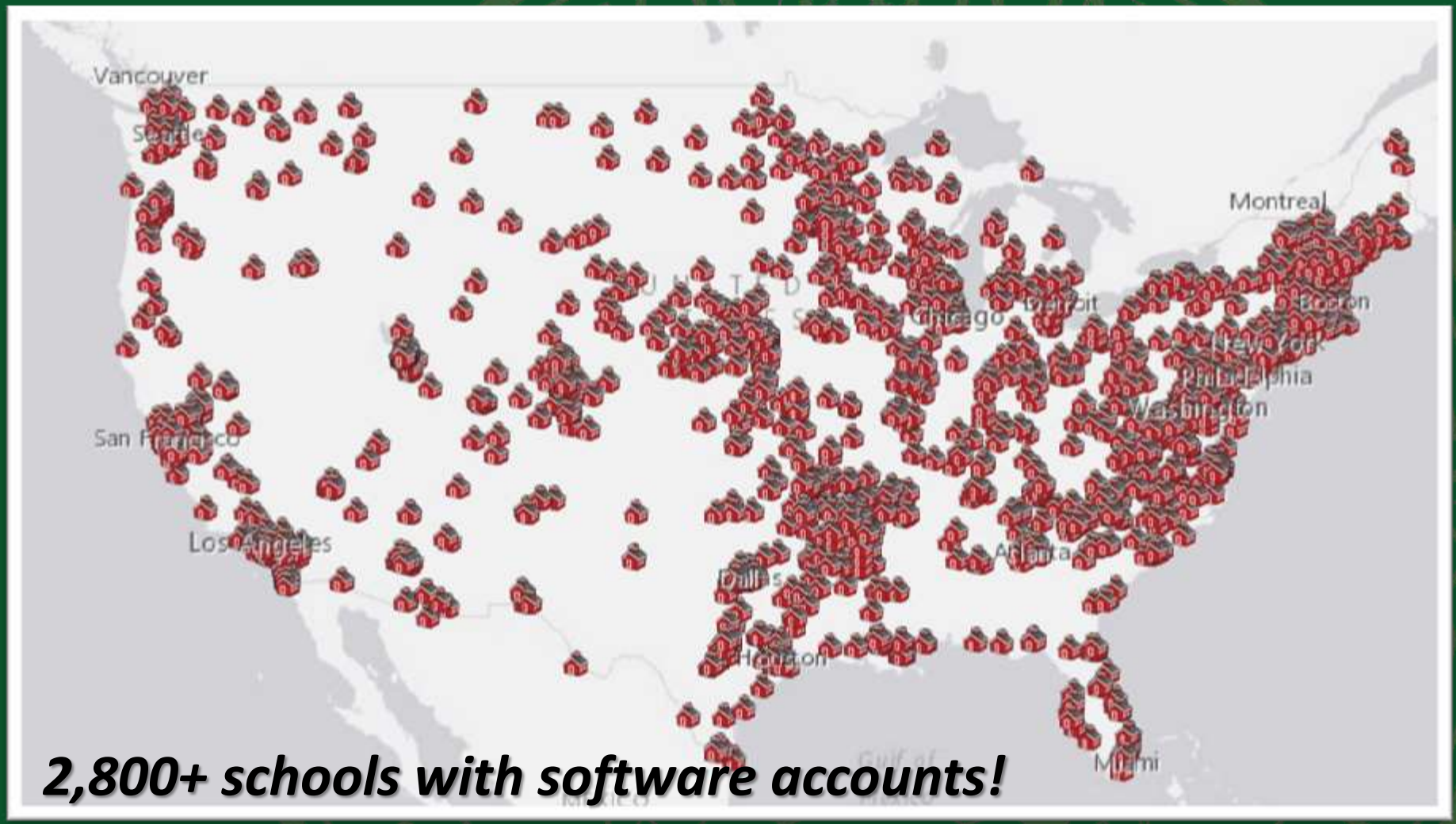
Before we can help add GIS to classroom curricula, we have to get the software into schools. One of the most important engagements you can perform as a GeoMentor is to recruit new schools to participate in the Esri ConnectED program! With the goal of ArcGIS Online usage in 25,000 US K-12 schools by 2017, the success of this program ultimately depends on people like you, volunteering your expertise as a GeoMentor and proactively seeking opportunities to bring GIS into new schools across the country.

- How do I find a school to recruit?
- **Why should schools participate?**
  GIS can benefit ALL classrooms. When recruiting a new school to the program, be prepared to explain the concept of GIS and what it has to offer to educational settings. GIS is not just for certain grade levels or subject areas; it has application potential throughout all schools and classrooms! You may draw from your own personal experiences and knowledgebase, but also be sure to review the materials developed specifically for educators available here.

- **Educators requesting help**
- **Local schools**
- **Youth groups: Girl Scouts, Boy Scouts, 4-H, Boys & Girls Clubs of America**
- ***Use your social network!***

www.geomentors.net/connect

Current Schools Map



2,800+ schools with software accounts!

Are your local schools participating?

Curated Collection of Resources

GeoMentor Training Materials

To help you prepare for GeoMentor volunteer opportunities, we've collected and curated information and materials that may prove useful to you and your K-12 school collaborators. Browse the links below to find background information about ArcGIS Online (AGO), AGO materials developed specifically for educators, free online AGO courses and activities that may be incorporated directly into classrooms, as well as information to guide you through different types of GeoMentoring engagements. We will continue to post more materials; if you have any resources you would like to suggest, please share them with us at geomentors@aag.org.

Previous experience with ArcGIS Online is not required. The resources below help you quickly gain basic skills that will make you an asset to K-12 classrooms. To learn how to access ArcGIS Online, click on 'About ArcGIS Online' below, or go here.

- About ArcGIS Online
- ArcGIS Online Training for Educators
- ArcGIS Online: Available Courses, Lessons, and Activities
- Training Materials for Different Engagement Types
- Data Sources and Learning Resources

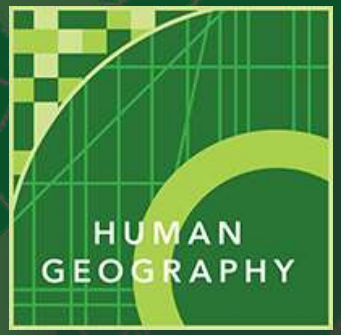
Questions? Email geomentors@aag.org

www.geomentors.net/prepare

GeoInquiries

- 15-minute activities designed for a single computer/projector classroom arrangement.
- No installation, fees, or logins are necessary to use these materials and software.

Any teacher can use a GeoInquiry, regardless of their prior experience with digital mapping tools.



http://edcommunity.esri.com/Resources/Collections/geoinquiries

GeoMentor Case Studies

- **Chuck:** Arizona; K-5th grades; Outdoor learning
- **Rob:** California; 2nd-5th grades; Geography Awareness Week lessons
- **Nicole:** Delaware; 5th Grade; GIS Day Careers Event
- **Lisa:** South Carolina; 6-12th Grade Teachers; GIS Workshop
- **Lindsay:** Florida; Grades 9-11; AP Human Geography

www.geomentors.net/review/case_studies

GeoMentor Case Studies

"Working as a Geomentor has been an amazing experience. The kids just love using the technology and love solving problems. It's the same reason I love GIS."

- Chuck, Arizona

"My experience encouraged me in my day-to-day work. It reminded me of how fun GIS can be, and how it can be applied to almost everything you do daily."

- Diana, California

Join Online GeoMentor Communities

twitter | esri GeoNet | facebook | AAG Knowledge Communities

www.geomentors.net/communicate

Monthly Newsletter and GM Spotlight

GeoMentors
AAG esri Community Newsletter

In This Issue
- Monthly Mentor Challenge
- GeoMentor Spotlight
- GeoMentors at the AAG Annual Meeting
- Featured Resource

Current GeoMentor Count: **1,000**

Current School Count: **2,730**

Questions?
Contact program staff at geomentors@aag.org

February 2016 www.geomentors.net Vol. 2, No. 2

2016 is moving right along! Stay connected with the GeoMentors community by tackling our monthly challenge and checking out the GeoMentor spotlight and Featured Resources. Attending the AAG Annual Meeting in San Francisco? Review our program activities and consider volunteering your time at the GeoMentors space and/or sharing your story at our GeoMentors session!

Questions? Email us at geomentors@aag.org!

Monthly Mentor Challenge

Now in our 2nd year of the re-energized GeoMentors program, we want to keep improving our work to enhance our community's impact on K-12 education. This month we challenge you to:

Suggest one way, big or small, that we can improve the GeoMentors program

Have a suggested resource or website amendment? Maybe a bit of advice to pass on to other volunteers? Let us know! Contact us via email, Twitter, Facebook, or our online feedback form. We appreciate your insight!

GeoMentor Spotlight

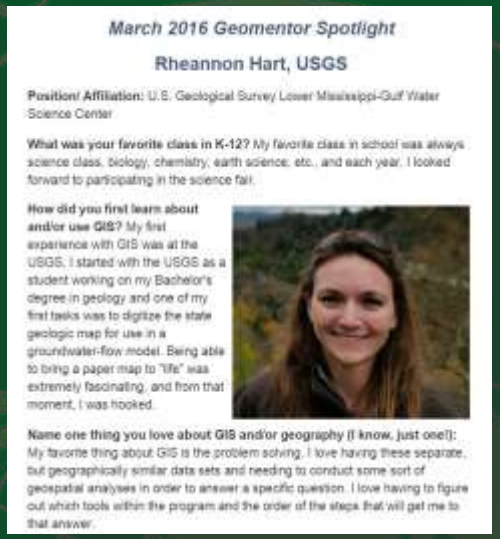
Each month we feature a GeoMentor volunteer to showcase the wonderful talent available in our community to assist K-12 schools.

Name: Marci Johnson

Position(s)/Affiliation(s): Biologist, National Park Service

What was your favorite class in K-12? Anatomy

How did you first learn about and/or use GIS? I took a course during my last semester at the University of Colorado, but by



March 2016 Geomentor Spotlight

Rheannon Hart, USGS

Position/ Affiliation: U.S. Geological Survey Lower Mississippi-Gulf Water Science Center

What was your favorite class in K-12? My favorite class in school was always science class, biology, chemistry, earth science, etc., and each year, I looked forward to participating in the science fair.

How did you first learn about and/or use GIS? My first experience with GIS was at the USGS. I started with the USGS as a student working on my Bachelor's degree in geology and one of my first tasks was to digitize the state geologic map for use in a groundwater-flow model. Being able to bring a paper map to "life" was extremely fascinating, and from that moment, I was hooked.

Name one thing you love about GIS and/or geography (I know, just one!): My favorite thing about GIS is the problem solving. I love having these separate, but geographically similar data sets and needing to conduct some sort of geospatial analyses in order to answer a specific question. I love having to figure out which tools within the program and the order of the steps that will get me to that answer.

January 2016 GeoMentor Spotlight

Brian King - GIS Analyst / Archeologist

Position/Affiliation: GIS Analyst V / Archeologist at Freese and Nichols, Inc., Austin, Texas; Staff Grader at the Pennsylvania State University, Dutton e-Education Institute, World Campus; Past-President URISA Texas (2012-2015); present Vice-President URISA Texas (2016); National Information Security, Geospatial Technologies Consortium (NISGTC), Board Member, since 2015.

What was your favorite class in K-12? History

How did you first learn about and/or use GIS? I started using GIS while working in Cultural Resource Management (CRM). I used ArcGIS to depict archeological site boundaries and the location of shovel tests and backhoe trench excavations across the site. A lot of my field data was collected using a Trimble GPS unit and I used a GIS for mapping. I enjoyed GIS so much that I earned a master degree from Pennsylvania State University.

Name one thing you love about GIS and/or geography (I know, just one!): A GIS allows people to spatially organize large datasets, visually view complex issues, and ask questions that lead to wise decision making.

www.geomentors.net/communicate

Gain Service and Outreach Experience

AAG-Esri GeoMentors Program

Certificate of Participation

is hereby granted to

Morgan Ripp

for service as a GeoMentor to

Phoenix Collegiate Academy
Phoenix, Arizona

AAG Douglas Richardson, Executive Director, Association of American Geographers

Jack Dangermond, President, Esri — esri

Granted 03/01/2016

ID: 2016009

GIS Certification Institute — GISP

GIS Certification Institute

From an Educator:

"I have gotten in touch with a Geo-Mentor, who actually got me in touch with another guy also, so I actually have TWO mentors now! They are great and have already been helpful when I told them I needed help using ArcGIS in my AP HUG and AP World History classes. In fact, one of them told me his kids will be going to the high school where I teach! Thank you so much for providing this service for educators like me who want to use ArcGIS more in my classes but aren't very familiar with how it works."

From a GeoMentor:

Register as a GeoMentor today!

www.geomentors.net/participate

Twitter: @AAGGeoMentors

Email: geomentors@aag.org

www.geomentors.net

Come by the GeoMentors space to get your name badge ribbon!