



RUNNING TOWARDS
GeoAwesomeness

Preliminary Program

IOWA GEOGRAPHIC INFORMATION COUNCIL BIENNIAL CONFERENCE

The Biennial IGIC conference is organized by the Iowa Geographic Information Council as an opportunity for GIS users across the state of Iowa and the Midwest to network with other GIS'ers and learn more about geospatial technologies!

April 8th – 9th, 2015
Workshops – April 7th, 2015
Cedar Rapids, Iowa

IGIC Chair

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Local Arrangements

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About the Conference

The Iowa Geographic Information Council sponsors a biennial conference that is geared to GIS users throughout the State of Iowa. The conference acts as a tool to help users gain efficiencies in their business processes by applying geospatial technologies. The conference is designed to attract individuals and organizations from government, private firms, academic, and utilities using GIS to develop solutions in their work.

Who Attends?

IGIC Biennial Conferences have attracted nearly 250 people. Most participants reside in Iowa and work for State, County, & Local governments, educational institutions, and private firms.

Where is the 2015 Conference?

The Conference will be held at Central College located in Pella, Iowa. Maps are available on the conference website!

How do I register for the conference?

The link below will direct you to RegOnline. You are required to be a conference attendee in order to present.

<https://www.regonline.com/igic2015biennialconferencegistmapit>

Your organization will have options of paying:

- By credit card on RegOnline (2% service charge)
- Check sent to IGIC (instructions on registration form)
- Dwolla (direct transfer funds; this option is much less

expensive for IGIC; see www.dwolla.com for more info

More Information is available on the IGIC conference website: conference.iowagis.org

Contact Anya Butt, Conference Chair, at butta@central.edu (641)628-7496.

2015 IGIC Biennial Conference

	Vermeer Science Center Room 240	Vermeer Science Center Room 241
	Tuesday April 7th, 2015	
8:00 AM - 6:00 PM	Registration	
8:00 AM - 12:00 PM	Workshop Cartography Basics	Workshop Basic Python
12:00 PM - 1:00 PM	Lunch - Not Provided	
1:00 PM - 5:00 PM	Workshop Geomentoring ThinkTank (FREE)	Workshop Intermediate Python

	Maytag Student Center – Conference Room and Commons
2:00 PM - 5:00 PM	Setup time for exhibitors and poster presentations
5:00 PM - 6:00 PM	Exhibitor Hall Open
6:00 PM	Opening Conference Session - Welcome and Introduction
6:15 PM	Evening Meal
7:00 PM	Keynote Speaker – Joseph Kerski, Education Manager for Esri Title: Geo-awareness, Geo-enablement, Geotechnologies, Citizen Science, and Storytelling: Geography on the World Stage
7:45 PM	Exhibitor Social
7:45 PM	Poster Exhibition Review

	Boat Room	Moore Room	Weller Room
	Wednesday April 8th, 2015		
7:00 AM - 8:30 AM	Breakfast at Central Market		
8:30 AM - 10:00 AM	Panel GeoMentoring	Concurrent Session 1 Data Delivery	Esri Track What's New with the ArcGIS Platform
10:00 AM - 10:30 AM	Break in Exhibitor Hall		
10:30 AM - 12:00 PM	Concurrent Session 2 Reporting	Concurrent Session 2 Open Source	Esri Track Introducing ArcGIS Pro
12:00 PM – 12:15 PM	Break in Exhibitor Hall		
12:15 PM - 1:15 PM	Noon Meal - IGIC Awards		
1:15 PM - 1:30 PM	Break in Exhibitor Hall		
1:30 PM – 3:00 PM	Panel Public Works	Concurrent Session 3 Agriculture	Esri Track Refresh your browser and update your Apps! (aka What's New with ArcGIS Online and Ready-to- Use Apps)
3:15 PM - 6:00 PM	Exhibitor Hall		

4:00 PM - 5:00 PM	First Annual IGIC 5K Run/Walk – around the town
6:00 PM - 7:00 PM	Social Hour at Maytag Student Center
7:00 PM - 8:30 PM	Evening Banquet
8:30 PM - 10:00 PM	IGIC Gives Back/Drinks and Digitizing – Open StreetMap Event

	Boat Room	Moore Room	Weller Room
	Thursday April 9th, 2015		
7:00 AM - 8:30 AM	Breakfast		
8:30 AM - 10:00 AM	Concurrent Session 4 Decision Making	Concurrent Session 4 Data Collection	Esri Track Download, Configure and Use – Focused Maps and Apps for Your Organization
10:00 AM - 10:30 AM	Break in Exhibitor Hall		
10:30 AM - 12:00 PM	Concurrent Session 5 Watershed Management	Concurrent Session 5 New Old Tricks	Esri Track ArcGIS Web AppBuilder: Javascript Apps Made Easy
10:30 AM - 12:00 PM	Exhibitor Tear-down		
12:00 PM - 1:00 PM	Closing Plenary Lunch - Exhibitor Prizes and Poster Contest Prizes		
1:00 PM - 2:30 PM	IGIC Board Meeting		

IGIS Workshops – Tuesday April 7th, 2015

Three tracks for workshops are available at the 2015 IGIC Conference. Participants may pick one from the morning and one from the afternoon. Lunch is not provided to workshop attendees.

Workshop 1 <i>Cartographic & GIS Basics</i> <i>Anya Butt, Central College</i> <i>Laurie Jackson, Jasper County</i>	Workshop 2 <i>Basic Python</i> <i>John DeGroote, University of Northern Iowa</i>
Workshop 3 <i>Geomentoring ThinkTank</i> <i>Jim Giglierano, Iowa State University</i> <i>Debbie Stevens, William Penn University</i> <i>Rick Havel, Johnson County</i>	Workshop 4 <i>Intermediate Python</i> <i>John DeGroote, University of Northern Iowa</i>

MORNING SESSIONS

(8:00 AM – 12:00 PM)

Workshop 1 Cartographic & GIS Basics

Instructor: Anya Butt, Central College and Laurie Jackson, Jasper County

Schedule: 8:00 am – 12:00 pm, Room 102 Vermeer Student Center

- This workshop will provide an overview of precision farming field practices that increase efficiency. Sessions will include: a preview of the technology; hands-on activities with guidance and application equipment; and a discussion efficiencies that the technology provides to the farmer. Actual use of the equipment will be dependent on number of participants and weather and soil conditions.

Workshop 2 Basic Python

Instructor: John DeGroote, University of Northern Iowa

Schedule: 8:00 am – 12:00 pm, Room 241 Vermeer Student Center

- Intermediate to advanced GIS users often find a need to automate data management, processing, analysis, or visualization tasks. The Basic Python workshop will introduce the Python language and give an introduction as to how it can be used in automating tasks in ArcGIS Desktop software (with some mention of other software such as QGIS). This morning session will introduce basic Python programming constructs such as variable, logical conditions, and looping. This session will also introduce ArcPy, the Python library that allows access to ArcGIS functionality through Python. The student will get the opportunity to try simple geoprocessing steps using ArcPy.

AFTERNOON SESSIONS

(1:00 PM – 5:00 PM)

Workshop 3 Geomentoring ThinkTank

Instructor: Jim Giglierano, Iowa State University Extension, Debbie Stevens, William Penn University, and Rick Havel, GIS Coordinator, Johnson County

Schedule: 1:00 pm – 5:00 pm, Room 102 Vermeer Student Center

- The goal of this activity on the afternoon of April 7 is to develop a collection of geomentoring materials that our IGIC members and others could use with different groups to introduce them to geospatial technology. Within IGIC we have several members that have already worked with teachers, students, youth groups and adults, so this effort will try to capture what they know, write it down, test it, and get it in a form that the rest of us can use. We will need 20 or more members to sign up to help out. We'll break into 5 or more groups, each with an activity/age group target. We'll need 3-5 people in each group. At past IGIC board meetings, we've compiled lists of potential activities. This will build on those ideas and create some concrete materials for our members to use in their own geomentoring efforts. If you have ideas for geomentoring, and want to lead a small group to develop the idea further, please sign up for this activity. If you want to help make others' ideas into something ready to use, please volunteer as well.

Workshop 4 Intermediate Python

Instructor: John DeGroote, University of Northern Iowa

Schedule: 1:00 pm – 5:00 pm, Room 241 Vermeer Student Center

- The intermediate Python session will move onto further applications of ArcPy and Python for automation of geoprocessing tasks in ArcGIS including cursors, further geoprocessing including raster Spatial Analyst examples, and map automation. Cursors provide the ability to loop through any type of table that ArcGIS understands (e.g. shapefile table, .dbf, Geodatabase feature class, etc.) to read records, create new records, or update existing records. This session will also introduce the mapping module of ArcPy which provides functionality for automating map production.

OTHER PERTINENT ACTIVITIES BASED ON PROGRAM

EXHIBITOR HALL OPEN – MAYTAG STUDENT CENTER COMMONS

(TUESDAY 5:00 TO 6:00 PM & 7:45 TO? PM)

(WEDNESDAY 7:00 AM TO 5:00 PM)

(THURSDAY 7:00 AM TO 10:30 AM)

The Exhibitor Hall opens on Tuesday evening at 5 PM. On Wednesday and Thursday, Conference participants are welcome to attend breaks in the exhibitor hall. Participants are encouraged to visit with industry specialists to discuss solutions available in today's consulting community.

OPENING SESSION / KEYNOTE SPEAKER

(TUESDAY 7:00 PM TO 7:45 PM)

Five converging global trends – geo-awareness, geo-enablement, geotechnologies, citizen science, and storytelling– are combining to offer GIS output and GIS professionals a world audience. Issues central to GIS professionals are now part of the global consciousness. Everyday objects are rapidly becoming locatable, and thus able to be monitored and mapped. Many tools and data sets that were formerly used and examined only by GIS analysts are now in the hands of the general public. Ordinary citizens are becoming involved in contributing data to the scientific community. Multimedia and cloud-based GIS have greatly multiplied the attraction that maps have had for centuries to tell stories. But despite these trends bringing opportunity to geography, is geoliteracy becoming increasingly valued? How can educators, researchers, and GIS practitioners seize the opportunity that these trends seem to present to actively promote core content knowledge, GIS skills, and the spatial perspective throughout education and society?

Joseph Kerski is a geographer who believes that spatial analysis with mapping and geotechnologies can transform education and society through better decision-making using the geographic perspective. He holds three degrees in Geography. He served for 22 years as geographer and cartographer at NOAA, the US Census Bureau, and the US Geological Survey. He teaches online and face-to-face courses at primary and secondary schools, through MOOCs, and universities such as Sinte Gleska University, Elmhurst College, and the University of Denver. Since 2006, he has served as Education Manager for Esri, with emphasis on thought leadership in geospatial technologies in formal and informal education at all levels, internationally. He focuses on GIS-based curriculum development, research in the effectiveness of GIS in education, professional development for educators, communication about the need for geographic skills, tools, and perspectives through keynote addresses, articles, social media, and workshops, and fostering partnerships to support GIS in education. Joseph is active in creating and teaching online courses in spatial thinking and geotechnologies. He has written books such as Spatial Mathematics, International Perspectives on Teaching and Learning with GIS in Secondary Schools, The Essentials of the Environment, Tribal GIS, and The GIS Guide to Public Domain Data.

MAPPING GALLERY
(REVIEW TUESDAY 7:45 PM)

Submittals will be hard copy posters or maps of projects, research, procedures or cartographic results that you want to share with your GIS colleagues. There will be three judged categories:

- **Student Poster:** Non-professional primary author
- **Professional Cartographic Map:** Map contents don't describe a project or research
- **Professional Analytic Poster:** Poster describes a project or research, procedures and results
- **Not Attending Conference General Category:** Poster/map by student or professional who can't attend the conference but wants to share their work. It can be any GIS topic or theme; these entries will be entered in a raffle.

Posters will be reviewed by judges during the Exhibition Review on Tuesday evening and throughout the day on Wednesday. Prizes for first place in each of the three categories will be awarded during the Closing Plenary Lunch on Thursday.

Please use the poster submittal form to send your information. Send the form to:

Jodi Flory, jodiflory@hotmail.com

GIS Consultant at Cornerstone Geospatial Consulting

Forms will be accepted through March 28. Once received and accepted you will get additional information about where to hang your poster at the conference.

PANEL Sessions

GEOMENTORING

(WEDNESDAY 8:30 AM)

Suggestions for GIS professionals for partnering with teachers/classrooms to provide a connection to geospatial activities. Sharing of age-appropriate activities, human and instructional resources, how to connect with interested instructors, and signing up as a GeoMentor. Ideas could be adaptable to K-12, Community College, and 4-Year Universities.

GIS IN PUBLIC WORKS ROUNDTABLE

(WEDNESDAY 1:30 PM)

How do you put GIS to work for Public Works? This roundtable on GIS for county and municipal Public Works departments will include a series of short talks and demonstrations from several organizations followed by discussion. We want to know what Public Works departments across Iowa are doing with GIS. Come share your successes!

WEDNESDAY NIGHT SOCIAL
(WEDNESDAY 6:00 TO 10:00 PM)

For the social time after dinner on April 8, we will be showing IGIC attendees how to use Open Street Map (OSM – pronounced “awesome”) online mapping tools, and the Mapgive humanitarian mapping website. Combined with liquid refreshments commonly found at IGIC social events, this should make for a really fun evening activity. The way this works, members attending the social will be asked to bring their laptop and get an OSM account before the conference. ISU GIS has been working on using OSM/Mapgive with college age students. Mapgive is oriented towards online crowd-sourced mapping for humanitarian efforts around the world. We will learn the OSM tool by mapping features in a small Iowa town. It’s fun to watch how in less than an hour, most of the town can be mapped by 20 or more people, and become part of the OSM base map. Then we introduce the Mapgive humanitarian task manager for finding projects around the world that need online mappers. It’s a real stretch to photo-interpret and map buildings in another country, another culture. We’ll try and make this activity both educational and fun, so you can take it home and map some more on your own, or better yet, teach it to someone else.

NOTE: You will need to bring your own laptop.

CONCURRENT SESSION 1

8:30 AM Wed, April 8th

1.1 Geomentoring Panel		
Suggestions for GIS professionals for partnering with teachers/classrooms to provide a connection to geospatial activities. Sharing of age-appropriate activities, human and instructional resources, how to connect with interested instructors, and signing up as a GeoMentor. Ideas could be adaptable to K-12, Community College, and 4-Year Universities.		
1.2 Data Delivery		
1.2.1	The National Map: Data Delivery Services (60 minutes)	Jim Langtry US Geological Survey Lincoln, NE
1.2.3	Iowa DOT Geospatial Environment	Eric Abrams Iowa DOT Ames, IA
1.3 Esri - What's New with the ArcGIS Platform		
ArcGIS 10.3 puts the entire platform at your disposal through the power of Web GIS. Join us as we provide an overview of What's New with ArcGIS, including: Desktop, Server, Online, Content, Mobile and Apps. Presenters: JD Overton and Tim Hensley		

CONCURRENT SESSION 2

10:30 AM Wed, April 8th

2.1 Reporting			
2.1.1	Storytelling with Esri Story Maps (60 Minutes)	Joseph Kerski Esri Broomfield, CO	
2.1.3	Producing Reports from the GDB	Karen Cedeno-Perdue Council Bluffs Water Works Council Bluffs, IA	
2.2 Open Source			
2.2.1	Community Data Generation, Research and Diffusion: An Integrated Approach Using Open-Source Tools	Christopher J. Seeger ISU Extension and Outreach- Community & Economic Development Ames, IA	Bailey Hanson ISU Extension and Outreach- Community & Economic Development Ames, IA
2.2.3	Open Source GIS for the Desktop: JUMP vs. QGIS	Lawrence Hartpence City of West Des Moines West Des Moines, IA	
2.2.3	Geospatial in the Web without the Infrastructure	Patrick Wilke-Brown Iowa DNR Des Moines, IA	
2.3 Esri - Introducing ArcGIS Pro			
	<p>ArcGIS Pro is the essential application for creating and working with spatial data on your desktop. It provides tools to visualize, analyze, compile, and share your data, in both 2D and 3D environments. Join us for this session as we provide an overview of this this exciting new release.</p> <p>Presenter: JD Overton</p>		

CONCURRENT SESSION 3

1:30 PM Wed, April 8th

3.1 Public Works Panel			
How do you put GIS to work for Public Works? This roundtable on GIS for county and municipal Public Works departments will include a series of short talks and demonstrations from several organizations followed by discussion. We want to know what Public Works departments across Iowa are doing with GIS. Come share your successes!			
3.2 Agriculture			
3.2.1	Automating Landform Classification for Crop Yield Analysis	Chad A. Goings Rolling Hills Consulting Services, LLC Washington, IA	
3.2.2	Mapping Agricultural Tiles with Remote Sensing	Jim Giglierano Iowa State University Ames, IA	
3.2.3	Care at the Patient Level	Scott Sandberg National Farm Medicine Center Marshfield, WI	
3.3	Esri - Refresh your browser and update your Apps! (aka What’s New with ArcGIS Online and Ready-to-Use Apps)		
ArcGIS Online and its Ready-to-Use Apps have seen some significant updates recently. This session will provide an overview to these updates on ArcGIS Online and hosted web application templates, Story Maps, and Apps like Collector, Operations Dashboard and Explorer.			
Presenter: Tim Hensley			

CONCURRENT SESSION 4

8:30 AM Thurs, April 9th

4.1 Decision Making				
4.1.1	Using GIS in Damage Assessment	Ryan S. Smith The Schneider Corporation Ankeny, IA		
4.1.2	GIS for the Council Bluffs Interstate System Program	Amy Sorensen HDR Omaha, NE		
4.1.3	The Use of Tablet Technology for Roadside Feature Condition Reporting and Decision Making	Shawn Blaesing Thompson Iowa DOT Ames, IA		
4.2 Data Collection				
4.2.1	Snowplows & AVL	Eric Abrams Iowa DOT Ames, IA		
4.2.2	Mobility, GIS and the Cloud	Simon Geletta Des Moines University Des Moines, IA		
4.2.3	Updated Positions software suite for GPS Data Collection	Gale Shea Seiler Instrument Franklin, WI	Scott Smith Seiler Instrument Belton, MO	Jay Reister Seiler Instrument Franklin, WI
4.3 Esri - Download, Configure and Use – Focused Maps and Apps for Your Organization				
ArcGIS Solutions provide ready-to-use maps and applications designed to help you leverage your geographic information and the ArcGIS Platform in your organization. Join us as we provide an overview of recent updates to the ArcGIS Solutions for State and Local Government.				
Presenter: JD Overton				

CONCURRENT SESSION 5

10:30 AM Thurs, April 9th

5.1 Watershed Management			
5.1.1	Iowa Statewide Flood Plain Mapping	Chris Kahle Iowa DNR Iowa City, IA	
5.1.2	Development and Testing of ArcGIS Extension for Urban Stormwater Modeling	John DeGroote University of Northern Iowa Cedar Falls, IA	
5.1.3	Precision Conservation Technologies to Facilitate Agricultural Watershed Planning	David James USDA/ARS Ames, IA	Sarah Porter USDA/ARS Ames, IA
5.2 New Old Tricks			
5.2.1	Enhancing Social Networks Analysis with GIS	Simon Geletta Des Moines University Des Moines, IA	
5.2.2	Tricks I Forgot from Kindergarten GIS	Herb Kuehne Sioux City, IA	
5.2.3	IGIC Informational Panel		
5.3 Esri - ArcGIS Web AppBuilder: Javascript Apps Made Easy			
<p>Esri's new ArcGIS Web AppBuilder is a HTML5/JavaScript-based application that allows you to create your own intuitive, fast and beautiful web mapping apps, in 2-D or 3-D, without writing a single line of code. Learn how you can interactively configure workflow-driven GIS apps that run seamlessly across all devices, and create both ready-to-use apps and ArcGIS Web App templates for ArcGIS Online or ArcGIS Portal. Learn the possibilities for developers to create custom widgets and themes for Web AppBuilder through the extensibility framework.</p> <p>Presenter: Tim Hensley</p>			

IGIC Attendee Registration Form

Please use our easy On-line Registration at:

<http://conference.iowagic.org/>

ONE REGISTRATION PER PAGE PLEASE

NOTICE: IF YOU HAVE GUEST(S) ATTENDING, PLEASE SEE OUR GUEST REGISTRATION FORM

Name (☐ Mr. ☐ Ms.) _____ Nickname _____
First Last
Address _____
Street City State ZIP
Business Name _____
Business Phone _____ Fax _____
Email: _____

FEES

Total

IGIC 2015 Conference	\$175	\$
Student - Symposium & Workshops	\$100	\$
Workshops	\$50 each	
Student One Day	\$25	\$
One Day-Symposium ¹ <input type="checkbox"/> Wed <input type="checkbox"/> Thurs	\$100	\$
AMOUNT ENCLOSED		\$

Note on Fees

1. One Day Registration Fee covers attendance for one day at the Conference, Lunch, and Exhibition Hall Reception. It does not include the Tuesday Social.

Workshops (IMPORTANT: REGISTRATION FEE FOR THE CONFERENCE DOES NOT INCLUDE WORKSHOPS, SEE FEE LIST ABOVE)

Morning Session - Pick One	Afternoon Session - Pick One
<input type="checkbox"/> <i>Cartography Basics</i>	<input type="checkbox"/> <i>Geomentoring ThinkTank (FREE)</i>
<input type="checkbox"/> <i>Basic Python</i>	<input type="checkbox"/> <i>Intermediate Python</i>

CHECK IN WILL BEGIN ON Tuesday April 7th CONTINUES THROUGHOUT THE SYMPOSIUM

PAYMENT BY credit card, check, or Dwolla

<https://www.regonline.com/igic2015biennialconferencegistmapitcopy>

Send Registration & Check
to c/o Iowa State University
Attn: Josh Obrecht
213 Durham
Ames, IA 50011

Make checks Payable to "IGIC". Check <http://conference.iowagic.org/> for the most up to date information.

Refund Policy: All cancellations and refunds are subject to a \$50.00 processing fee. No refunds will be provided after March 25th, 2015. To qualify for a full refund, a written cancellation notice must be sent to Josh Obrecht.

Pella, IA – Lodging and Logistics

Hotel Information

The current rate of \$84 / night is available for IGIC conference attendees. For reservations, please call 641-620-8400. Specify that you are with IGIC. For those of you starting your conference experience with an 8am workshop on April 7th, there are rooms available April 6th at the Royal Amsterdam all for the same conference price of \$84 per night.

Royal Amsterdam Hotel
705 East 1st St
Pella, IA 50219

There will also be some rooms for IGIC at Country Inn and Suites (\$83 / night).

Country Inn and Suites
315 Roosevelt Rd
Pella, IA 50219
641-620-1111
cx_pell@countryinns.com

Additional Information:

For a map of Central College's Campus, [click here](#).

In the Area:

Learn about local attractions in Pella by visiting <http://www.pella.org/visit-pella/>.