Agenda

• Welcome
• Dr. Ken Olliff, VP of Research, Saint Louis University
  • Opening Remarks
• Introductions
• Dr. Vasit Sagan/Dr. Mark Brickhouse, Saint Louis University
  • SLU Geospatial Degrees and Certification Programs
  • SLU/NGA Geo-Resolution
  • Geospatial 101 - Fall 2019
• Dr. Dwyane Smith, Harris-Stowe State University
  • Spark the Mind: Advancing the Agenda of African Americans in STEM
• Kari Craun, USGS
  • National Geospatial Technical Operations Center
• Ronda Schrenk, USGIF
  • GEOINT Symposium 2019 Update
• Subcommittee Status Updates
  • K-12 Subcommittee Update: Gateway GIS Update
  • University and R&D Subcommittee Update
• Open Discussion & Takeaways
Introductions

• Name
• Organization
• How long have you been involved with the SLAWG?
• How are you participating? Are you on any subcommittee or what is your interest?
What is the SLAWG?

The SLAWG is a volunteer-based group formed under the U.S. Geospatial Intelligence Foundation (USGIF), a 501c3 educational nonprofit dedicated to supporting the geospatial intelligence tradecraft. It is a group of industry, government, academic and community partners with a goal to clarify pathways for education and training for geospatial careers and certifications in the St. Louis region, and identify needs for new pathways to integrate with existing efforts.
Calendar of Events

- **April**
  - GIS/Earth Day! St. Louis Regional Celebration Spring 2019 at Lindenwood University, April 2\textsuperscript{nd}
  - Geo-Resolution 2019: The 21\textsuperscript{st} Century Geospatial Ecosystem, April 9\textsuperscript{th} (SLU)
  - Esri Midwest UC, April 16\textsuperscript{th} and 17\textsuperscript{th} (Hilton Ballpark Village)
  - SLUG, April 25\textsuperscript{th} (CIC Havana) @ 12:30 – 2:30 PM
  - MOGISCON, April 29\textsuperscript{th} – May 1\textsuperscript{st} (DoubleTree Chesterfield)
  - Job Shadowing, Career Explorations Alliance through the City of St. Charles School District, Spring Career Weeks, April 2-5 and 9-12, 2019.
    - Contact Jessie Skeen, CEA Program Specialist, (636) 443-4207

- **May**

- **June**
  - USGIF GEOINT 2019, June 2-5, 2019 in San Antonio, TX
  - Women in Geospatial Technology Summit, June 27\textsuperscript{th} @ T-REX, 1 – 5 PM
GeoSLU: Geospatial Research, Training and Innovation Initiative

- New Course Offerings - On-line and classroom

- New or revised Degree Programs
  - B.S. in Geoinformatics and Geospatial Analytics
  - M.S. in GIScience (updated curriculum to market demand)
  - Ph.D. in Environmental Sciences and GIS → Geoinformatics and Geospatial Analytics
  - Dual degrees in GIScience/MBA and International Business
  - Geospatial Health Certificate (under development)
  - Minor in Computational Geospatial Science
  - Graduate and Undergraduate Certificates in GIScience

- USGIF Certification
Introduction

Mr. Francis Rose

Host of “Government Matters”
Moderated Discussion on the Geospatial Future of St. Louis

8:30 – 9:00 a.m.

Vice Admiral Robert Sharp, NGA Director

President Fred Pestello, Saint Louis University

Ms. Kristin Robertson, Vice President and General Manager for Boeing’s Autonomous Systems Division
Morning Keynote Address

9:00 a.m. – 9:35 a.m.

Dr. Annette Sobel

Former Major General in the Arizona Air National Guard, first Director of Intelligence for the National Guard Bureau, Arlington, VA., second Homeland Security Director to serve the State of New Mexico, Senior Advisor to Saint Louis University
Panel 1: Changing Patterns of Human Settlement and Mobility

9:45 a.m. – 10:30 a.m.

Dr. Marie Price, President, American Geographical Society
Ms. Elizabeth Lyon, NGA Senior GEOINT Authority for Geography and Cartography
Dr. Ness Sandoval, Saint Louis University Associate Professor, Sociology
Dr. Lee Schwartz, The Geographer, U.S. Department of State
Dr. Steven Ward, Senior Director of Geospatial and Weather Sciences at The Climate Corporation
Evolving Capabilities for the GEOINT Enterprise

10:45 a.m. – 11:30 a.m.

Mr. Francis Rose, Host of “Government Matters”

Mr. Jack Dangermond, President, Esri
Afternoon Keynote Address

12:45 p.m. – 1:30 p.m.

Dr. James Reilly, Director of the U.S. Geological Survey (USGS)
Panel 2: The Holistic Worldview, Advanced Analytics and Predictive Tools

1:30 p.m. – 2:15 p.m.

Mr. Andy Dearing, CEO, Boundless Spatial, Inc.

Ms. Sue Kalweit, Director, Analysis, NGA

Dr. Sharlee Climer, Assistant Professor, Department of Mathematics and Computer Science, University of Missouri, Saint Louis (UMSL)

Dr. Stacey Dixon, Director, Intelligence Advanced Research Projects Activity (IARPA), ODNI

Mr. Robert Shelton, Jr., Chief Technical Officer and Advisor for Microsoft’s National Intelligence Division
Panel 3: Public/Private Partnerships, Commercialization and Entrepreneurship in the Geospatial Ecosystem

2:30 p.m. – 3:15 p.m.

Mr. Jason Hall, CEO, Arch to Park
Ms. Christy Monaco, Director, NGA Office of Ventures and Innovation
Dr. Dedric Carter, Associate Provost and Associate Vice Chancellor for Innovation and Entrepreneurship, Washington University
Dr. Dwyane Smith, Provost, Harris-Stowe State University
Mr. Jim Kavanaugh, CEO, World Wide Technology
Mr. Jeff Harris, Chairman of the Board of USGIF
Post-Conference Social: Wool Ballroom
3:30 p.m. – 5:30 p.m.

Career Fair: Saint Louis Room, Room 300
3:30 p.m. – 5:30 p.m.
Spark the Mind: Advancing the Agenda for African-Americans in STEM
April 4-5, 2019
Dr. Dwyane Smith, Provost & Conference Convener
Save the Date!

SPARK THE MIND: ADVANCING THE AGENDA FOR AFRICAN-AMERICANS IN STEM

“Join this national conversation on workable methods to increase the number of African-American students in STEM”

GUEST FACILITATORS AND SPEAKERS:

- Dr. Aprille-Joy Ericsson
  Aerospace Engineer, National Aeronautics and Space Administration (NASA)

- Dr. Claudia Rankins
  Program Director, HBCU-UP, CREST, CAREER, National Science Foundation

- Dr. A. James Hicks
  Program Director Louis Stokes Alliances for Minority Participation (LSAMP), National Science Foundation

- Dr. Kama B. Bobb
  Senior Director for Constellations, Center for Equity in Computing, Georgia Institute of Technology

- Dr. Christopher Emdin
  Associate Professor, Department of Mathematics, Science and Technology, Associate Director of the Institute for Urban and Minority Education, Teachers College, Columbia University

APRIL 4 - 5, 2019 | ST. LOUIS, MO

Harris-Stowe State University Dr. Dwaun J. Warmack Auditorium 3026 Laclede Avenue St. Louis, MO 63103

CONFERENCE FEES: STUDENT $25 · ADULT $50
REGISTER FOR CONFERENCE AT HSSU.EDU/STEMCONF OR EMAIL STEMCONF@HSSU.EDU
HOTEL RESERVATIONS · MARRIOT ST. LOUIS GRAND · 314.621.9600

STUDENT CENTERED | STUDENT FOCUSED | STUDENT DRIVEN
Goals of the STEM Conference

• Overall Goal is to find workable solutions in increasing the number of African-American students in STEM
• Examine solutions from a PK-16 perspective
• Various national and regional STEM leaders will provide insight and dialogue on the persistent challenge and opportunity in credentialing African Americans in STEM
Highlights

• Dr. Aprille Ericsson, Aerospace Engineer, first African-American woman to earn a Ph.D. in Mechanical Engineering from Howard University and a Ph.D in Engineering at the NASA Goddard Space Flight Center
• Kick-off Keynote: Thursday, April 4 @ 6:30 p.m.
• Panel Discussion: STEM Inspiration: African-American STEM students—5th grade to high school on STEM Awareness
Highlights

• L.I.F.E. Arts will provide a pre-conference performance at 6:00 p.m.—A suite tribute to Bob Gibson as part of the “A” in STEM performances throughout the conference
Highlights

• Dr. Christopher, Associate Professor, Department of Mathematics, Science and Technology, Associate Director of the Institute for Urban and Minority Education, Teachers College, Columbia

• Claudia Rankins, Program Director, HBCU-UP, National Science Foundation

• Dr. Kamau Bobb, Senior Director for Constellations, Center for Equity in Computing, Georgia Institute of Technology
Highlights

• Dr. Cheryl Watkins Moore, Director, STEM Entrepreneurial Inclusion Initiative
• Kendall Norris, Global Leadership Forum
• Shay Gillespie, Parent & STEM Activist
Highlights

- Panel: African-American Men in STEM
- Panel: African-American Women in STEM
- Sparking the Mind: Where It All Begins: the role of PK-12 in advancing STEM
- Plenary Session: Access to STEM Education; Access to Power
- National Advocacy and Policy:
  - Dr. Claudia Rankins, Program Officer: National Science Foundation awards $36 million annually for STEM Initiatives to HBCU’s
  - Dr. A. James Hicks, Program Officer, LSAMP, awards $40 million annually to institutions nationally to increase the number of underrepresented groups earning STEM degrees
  - Responsible for more than 500,000 underrepresented students earning STEM Degrees
Highlights: The “A” in STEM Segments

- The “A” in STEM will focus on STEAM and how the Arts intersect with Science, Technology, Engineering and Math
- Various artists will perform in five to 10 minutes segues between sessions
- Artists will include Michael Casimir, Julliard graduate and Violist with the St. Louis Symphony, L.I.F.E. Arts, from classical to Hip-Hop
Highlights: Undergraduate Research

- African-American undergraduate STEM scholars from institutions including Missouri State University, Truman State University and Harris-Stowe State University will be presenting their research in poster presentations, Thursday and Friday.
Why STEM Conference at HSSU?

• Harris-Stowe is a leader in the state in enrolling African-American students in STEM related Fields.
  – Ranked #50 in U.S. in graduating African-Americans in Mathematics
  – Graduates are attending diverse schools such as Washington University, Indiana University, Alabama A&M, University of Colorado,

• Received more than $13 million within last 10 years for STEM programs

• Lead institution in $5 million LSAMP grant to increase the number of underrepresented groups earning STEM degrees. Schools include: Washington University, University of Missouri Columbia, University of Missouri, Columbia, University of Missouri, St. Louis, Truman State University, University of Central Missouri, Lincoln University, Missouri State University, St. Louis Community Colleges.
Registration Information

- **Registration:** $25 for students $50 for adults
- **Waivers are available for those who wish to attend but unable to pay the $50 fee:** Code: Waiver
- **Register:**
  
  [www.hssu.edu/stemconf](http://www.hssu.edu/stemconf)
Spark the Mind: Advancing the Agenda for African-Americans in STEM
April 4-5, 2019
Dr. Dwyane Smith, Provost & Conference Convener
U.S. Geological Survey
National Geospatial Program
Status and Plans for 2019 and Beyond

Ms. Kari Craun, Director, National Geospatial Technical Operations Center
United States Geological Survey
March 27, 2019
Agenda

- Organizational Introduction
- A focus on natural features – elevation/terrain and hydrography
- The future of USGS Topographic Maps, including services and dynamic content
The U.S. Geological Survey:
A Rich Scientific Tradition in the Department of the Interior
The National Geospatial Program (NGP)

Mission:

To serve the nation by providing topographic information to advance science, support government, enlighten citizens, and enable decision-making.

The National Geospatial Program is the U.S. civilian national mapping organization.
National Geospatial Technical Operations Center (NGTOC)

Mission

The U.S. Geological Survey National Geospatial Technical Operations Center (NGTOC) provides leadership and world-class technical expertise in the acquisition and management of trusted geospatial data, services, and map products for the Nation.

The NGTOC is the operational organization supporting the National Geospatial Program

Offices are in Rolla, MO and Denver, CO
NGP Principle Program Areas
Geospatial products and services support key priorities

<table>
<thead>
<tr>
<th>Area of National Leadership</th>
<th>Program Emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-16 Lead for Terrestrial Elevation</td>
<td>3D Elevation Program (3DEP)</td>
</tr>
<tr>
<td>A-16 Co-Lead for Inland Waters</td>
<td>National Hydrography and Watershed Boundaries Datasets, NHD+HR and Open Water Data Initiative</td>
</tr>
<tr>
<td>Nationwide Topographic Maps</td>
<td>U.S. Topo and Alaska Mapping</td>
</tr>
</tbody>
</table>
3D Elevation Program (3DEP) Goals

- Complete acquisition of nationwide lidar (IfSAR in AK) in 8 years
- Address Federal, state and other mission-critical requirements
- Realize ROI 5:1 and potential to generate $13 billion/year
- Leverage the capability and capacity of private mapping firms
- Achieve a 25% cost efficiency gain
- Completely refresh national data holdings

### Annual Benefits

<table>
<thead>
<tr>
<th>Rank</th>
<th>Business Use</th>
<th>Conservative</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flood Risk Management</td>
<td>$295M</td>
<td>$502M</td>
</tr>
<tr>
<td>2</td>
<td>Infrastructure and Construction Management</td>
<td>$206M</td>
<td>$942M</td>
</tr>
<tr>
<td>3</td>
<td>Natural Resources Conservation</td>
<td>$159M</td>
<td>$335M</td>
</tr>
<tr>
<td>4</td>
<td>Agriculture and Precision Farming</td>
<td>$122M</td>
<td>$2,011M</td>
</tr>
<tr>
<td>5</td>
<td>Water Supply and Quality</td>
<td>$85M</td>
<td>$156M</td>
</tr>
<tr>
<td>6</td>
<td>Wildfire Management, Planning and Response</td>
<td>$76M</td>
<td>$159M</td>
</tr>
<tr>
<td>7</td>
<td>Geologic Resource Assessment and Hazard Mitigation</td>
<td>$52M</td>
<td>$1,067M</td>
</tr>
<tr>
<td>8</td>
<td>Forest Resources Management</td>
<td>$44M</td>
<td>$62M</td>
</tr>
<tr>
<td>9</td>
<td>River and Stream Resource Management</td>
<td>$38M</td>
<td>$87M</td>
</tr>
<tr>
<td>10</td>
<td>Aviation Navigation and Safety</td>
<td>$35M</td>
<td>$56M</td>
</tr>
<tr>
<td>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Land Navigation and Safety</td>
<td>$0.2M</td>
<td>$7,125M</td>
</tr>
<tr>
<td>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total for all Business Uses (1 – 27)</strong></td>
<td><strong>$1.2B</strong></td>
<td><strong>$13B</strong></td>
</tr>
</tbody>
</table>
3D Elevation Program (3DEP)

Applies ground-breaking lidar technology to acquire and distribute 3D data

Addresses a broad range of critical applications of national significance

- 3D data include surface elevations and natural and constructed features
- 3DEP increases the quality level of lidar being acquired to enable more accurate understanding, modeling, and prediction
- Goal to acquire national coverage in 8 years
Explain the map showing the extent and quality level of planned, in progress, and existing publicly available lidar (in Alaska) data that meet 3DEP base level specification as of September 2018. 3DEP base level specification data are defined as quality levels 2 or better lidar data (HSAR in Alaska) and 8 years old or newer. The inventory was produced in partnership by the U.S. Geological Survey and the National Oceanic and Atmospheric Administration. While every attempt has been made to accurately inventory projects that are publicly available, some errors and omissions may occur.
Where and how can lidar be used?
3D Elevation Program (3DEP)

Mission Critical Applications

- Flood Risk Management
- Geologic Hazards
- Infrastructure Management
- Aviation Safety
- Precision Forestry
- Alternative Energy
- Archaeology
National Hydrography and Watershed Boundaries Datasets

Framework for indexing water related observations
### NHDPlus HR

- A first step in addressing needs documented in the Hydrography Requirements and Benefits Study
- Integrate NHD, WBD and elevation
- Provide functionality of NHDPlus with detail and accuracy of local resolution NHD
- NHDPlus HR Beta planned to be completed in 2020 for CONUS, followed by AK, HI, and territories in later years
- Users feedback will be used to update and improve the data

#### IN USE TODAY: NHDPlus Medium Resolution vs IN PROGRESS: NHDPlus High Resolution

<table>
<thead>
<tr>
<th></th>
<th>IN USE TODAY: NHDPlus Medium Resolution</th>
<th>IN PROGRESS: NHDPlus High Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrography source</td>
<td>1:100,000-scale NHD</td>
<td>1:24,000-scale or better NHD</td>
</tr>
<tr>
<td>Elevation source</td>
<td>30 meter</td>
<td>10 meter</td>
</tr>
<tr>
<td>Number of features</td>
<td>2.7 million</td>
<td>26 million</td>
</tr>
<tr>
<td>nationwide</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Future

Hydrography derived from lidar

HRBS indicates that the best way to meet most medium to long-term requirements is through fully integrating hydrography and elevation data by deriving hydrographic data from 3DEP data.

<table>
<thead>
<tr>
<th>Elevation source</th>
<th>IN USE TODAY: NHDPlus Medium Resolution</th>
<th>IN PROGRESS: NHDPlus High Resolution</th>
<th>FUTURE: Hydrography Derived from Lidar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrography source</td>
<td>1:100,000-scale NHD</td>
<td>1:24,000-scale or better NHD</td>
<td>1:5,000-scale or better derived from lidar</td>
</tr>
<tr>
<td>Number of features</td>
<td>2.7 million</td>
<td>26 million</td>
<td>200-300 million</td>
</tr>
</tbody>
</table>

Simulates conditions for 2.7 million stream reaches, representing the biggest improvement in flooding forecasting ever.
6 STRATEGIES: A Vision for the Future Generations of USGS Hydrography and Elevation

1. COMPLETE NATIONWIDE BASELINE DATA
   - Unifies observations and measurements onto one multiscale hydrography framework
   - Realizes the benefits and ROI of nationwide lidar

2. ESTABLISH THE NATIONAL HYDROGRAPHY INFRASTRUCTURE
   - Implement the NHI as the authoritative, universal source for sharing and discovering water information

3. INTEGRATE HYDROGRAPHY AND ELEVATION
   - Derive hydrography with Z-values from lidar to move from the neighborhood to the street-level in accuracy of features

4. INTEGRATE MAN-MADE SYSTEMS AND GROUNDWATER
   - Integrate connection points to man-made hydrologic systems and groundwater to allow better accounting of the hydrologic cycle

5. INTEGRATE INLAND BATHYMETRY
   - Extend elevation surface under water bodies
   - Replace estimated flow volume with volume calculated from the mapped surface

6. REPEAT COVERAGE
   - Enable monitoring and change detection
   - Analytical capabilities increase exponentially with the availability of multiple data vintages

3DEP & NHDPlus HR

Enables 3D topographic maps and links with 3D geologic models to visualize data in new and unimagined ways

Supports the National Water Model, National Water Census, drought, water availability and use

Supports the 3D Nation vision of elevation data from the depths of the oceans to the peaks of the mountains

Realizes the benefits and ROI of the 3D Nation Study
Current Focus: US Topo
National Topographic Maps

US Topo

- Modeled on standard 7.5-min quads
- Layered GeoPDF® (Geospatial PDF is coming)
- Orthoimage base
- Core feature layers
- 3-year production cycle for CONUS
- Free download through store.usgs.gov, nationalmap.gov, data.gov, USGS Sciencebase
- Hardcopy fee for service order through store.usgs.gov

2009

- Aerial Imagery
- Roads
- Names
- Elevation Contours
- Hydrography
- State/County/USFS Boundaries
- Runways
- Woodland
- Railroads
- PLSS
- Fire Stations
- Hospitals
- Schools
- Military Boundaries
- Cemeteries
- Post Offices
- Shaded Relief
- Selected Trails
- FWS Boundaries
- State Capitals
- Police Stations
- Correctional Facilities
- IMBA Trails
- National Scenic Trails
- Fish and Wildlife Service Wetlands
- Updated Road network
- Great Smoky Mountain Nat’l Park
- Landform polygons

2016
USTopo Production History
Staged US Topo Maps:
- Standardized, high quality, consistent geospatial PDF topographic maps.

TNM Basemaps, Tiles and Templates:
- Standardized, high quality, consistent topographic basemap services, tiles, templates and data.

Dynamic Custom Mapping:
- Flexible application that support USGS Mission areas and Partners.
- User-defined, non-TNM content overlain on Standard TNM basemaps.
- Basemap design supports mashups.
- Multiple scales: 20K-, 24K-, 25K-, 50k-, 100K.
- Multiple formats: Geospatial PDF, GeoTIFF, Data/Map Pkg, OGC GeoPackage.
- Custom AOIs.
New Development: Toward Interactive Map Generation
Production Mapping for ArcGIS Server
Product on Demand (POD) vector page maps

Export Queue
Product: US Topo 100K
Export Format: Production PDF
Page Size: 63x88 CENTIMETERS
Orientation: Portrait
Extent Width: 47,000.00
Extent Height: 60,500.00
Map Units: METERS
Map Sheet Name: Boston
Custom Name: Boston

1 product of 1 selected

Export Products
Batch Export Products
Batch Status

Choose a Product...

Product: US Topo 100K No Imagery
Product Description: Produces a map to a 1:100000 scale map
Export Format: Production PDF
Scale: 1:100000
Page Size: 63x88 CENTIMETERS

Format Options
Example: 1:250K-Scale Hurricane Support Map produced interactively

- Aug/Sept 2017: Hurricanes Harvey, Irma, Maria
- National Guard Requested Authoritative Maps for 1:24K US Topo Maps
  - US Topo Maps Cover Small Areas and Thousands of Maps - not Ideal for Planning Purposes
  - Custom 1:250K Special Edition Maps
Next Steps: Support Product Generation with Interactively Added Content

**EXAMPLE ONLY:**
TNM Topo Basemap
PLUS
USMIN Topographic Mine Symbols

- Support addition of web services selection prior to map export

- Work on Prototype with USFS
The National Map Download Platform (nationalmap.gov)
Lidar Explorer: Amazon public data

http://prd-tnm.s3.amazonaws.com/LidarExplorer/index.html#
Delivery of Data, Products, and Services

- **Current Capabilities**
  - Staged Products delivered from an Amazon cloud environment through multiple channels (USGS other government domains as well as private sector and other providers)
  - All public domain (freely available, no license or usage restrictions)
  - Products and services typically “fixed” scale and resolution
  - Cached base map services and some dynamic web services (map and geoprocessing)

- **Future Capabilities**
  - Dynamic, user defined, customizable products and services
  - All public domain (freely available, no license or usage restrictions); may have to “govern” download of large datasets; moving to “requester pays” option to download large datasets faster.
  - Products and services available at multiple scales and resolutions, dynamically generated
  - More service-based access to data
  - Increased capability to integrate with other scientific data
Thank you! (kcraun@usgs.gov)
Thank you Dr. Patty Hagan, President of T-Rex, the Bayer Corporation, and the Mayor of Saint Louis, for your support and encouragement to house the first ever Geo-Analytic Hub dedicated solely to Combating Wildlife Trafficking (CWT Geo-A Hub) and one of the first operational Hubs within Geosaurus!

Our CWT GeoA Hub goal is to conduct data-driven, geospatial analysis (vector, raster, and sensor data) and the associated predictive modeling for poaching interdiction of multiple species, globally, with and for all CWT stakeholders.

By forging a key partnership with Chengeta Wildlife, in concert with key NGO partners and with new partnerships on the horizon, the future is bright for creating unity to solve this threat to wildlife.

Partnership expansion includes other NGOs, zoological research, and academia-through our newly established, first ever CWT Academic Consortium with core membership from Saint Louis University, University of Missouri – St. Louis, Washington University, and University of Kansas.

It was an honor to be a part of the ceremony as we broke ground to introduce the Geosaurus Research Center and our ground breaking focus on the topic of Combating Wildlife Trafficking on a global scale, right here in the heart of St. Louis, Missouri.

Sincerely, Odean

Odean Serrano, PhD Founder/Director | Geosaurus, CWT Geo-A Hub
T-REX: GEOSAURUS EARTH DAY
Two Evening Events
APRIL 22 & 23, 2019
Address: 911 Washington, Avenue, St. Louis, MO 63101, 5th Floor
Dr. Odean Serrano | Combating Wildlife Trafficking Geo-Analytic Hub | Founder

April 22nd T-Rex Earth Day Presentation
Featuring: Damien Mander: The Akashinga Women Rangers

Registration Requested | Free Admission | Eventbrite
http://tinyurl.com/y647l2sd
Agenda: 4:30 Registration|5:00-7:00 Presentation | 7:00-9:00 Beer/Wine Reception

April 23rd T-Rex Earth Day Film Series: The Last Animals (Private Screening)
Guest Speaker, Kate Brooks, Director

Registration Requested | Free Admission | Eventbrite
http://tinyurl.com/y6slzwnh
Agenda: 5:00 Registration|5:30-7:00 Presentation | 7:00-9:00 Beer/Wine Reception

T-Rex Transportation and Parking:
Car: Street parking is available downtown along with our short term visitor parking lot on 10th Street.

MetroLink: Convention Center and 8th & Pine stations are both just a couple blocks away.

Bus: The 99 (Downtown Trolley) and 32 lines run along Washington Avenue in front of our building.

Bike: Bikes are welcome at T-REX. We have a free storage area for bikes in our locker room located off of the 5th floor co-working space.
Combating Wildlife Trafficking Geo-Analytic Hub (CWT GEO-A)
Meet Our Geospatial & Imagery Analysts!
We Conduct Geo-Analytics & Modeling to Help Stop Wildlife Poaching & Trafficking!!!

Odean Serrano, PhD
Geosaurus
Founder, Director,
Combating Wildlife Trafficking Geo-A Hub
Found, Director
CWT Academic Consortium
911 Washington Ave
St. Louis, MO 63010

&

Chengeta Wildlife
Director, Geo-Analytics & Research

Gizelle Rebecca Cota
CWT Geo-A Hub Intern
Lead, CAR Geo-Analyst
(Saint Louis University)

Rasa Whittaker
CWT Geo-A Hub Intern
Lead, Mali Geo-Analyst
(DePaul University)

Joe Hartung
CWT Geo-A Hub Intern
Lead, Elephant Tracks Project

David Ridge
CWT Geo-A Hub Intern
Lead, Imagery Analyst
(Saint Louis University)

Dustin Turpin
GeoSTL, Founder
Mapping Expert

Matt Woodlief
CWT Geo-A Hub
Esri Solution Engineer
GatewayGIS Pipeline Update (03.27.19)

• Community Engagement Partners
  • St. Louis Public Schools GIS Pathway and Flagship School: Clyde C. Miller Career Academy High School and feeder schools (Daytime/Weekdays)
  • East Side Flagship Schools: Madison (Illinois) Community Unit School District #12 (Daytime/Weekdays)
  • Herbert Hoover Boys & Girls Club: Teen Tech Center (After-School Program)
  • Saint Louis Science Center YES (Youth Exploring Science) Teen Program: GIS Saturdays
GatewayGIS Pipeline Update (03.27.19)

- **Dr. B. Remy Cross: Pre-/Post-Assessment**
  - For participating students of Clyde C. Miller Career Academy High School and the Madison CUSD #12

- **Esri and GeoMentors**
  - ArcGIS Training Series
    1. Train the Trainer Sessions
    2. Training for Technical Staff
    3. Professional Development for Educators
    4. Self-Paced Student Training
GatewayGIS Pipeline Update (03.27.19)

• SLPS/Clyde C. Miller Career Academy-Open House
  • Staff, students, parents/significant others, neighbors, etc.

• Save the Date: **Thursday, May 23, 2019 (8 am – 11 am)** at Webster University Gateway Campus
  • **Young Entrepreneur Speaker Spotlight:** Jaylen D. Bledsoe, the CEO of Jaylen D. Bledsoe Global Group
  • Exhibitors with interactive demonstrations for **Orientation Showcase**
GatewayGIS
Thank you.
University and R&D Sub-Committee Updates
University/Research and Development Subcommittee Update

1. Newly re-formed subcommittee. Still in formation phase.

2. Some folks not completely supportive of joining two subcommittees, but this is where we are at presently.

3. After two meetings, discussion is starting to revolve around the following:

   a. Purpose of group. Meetings and networking could range from simple updates and information sharing, all the way to creating mutually beneficial initiatives and outcomes.

   b. Relationship with USGIF. For example, does this local subcommittee connect more fully to the existing academic workgroups that USGIF charters in the DC area? Or does this subcommittee focus more on local/regional work in a partnership with USGIF?

   c. Limitations. How do we use our limited time together: once a month meetings, volunteers, attendees dropping in and out, busy full time jobs otherwise? (Depends on the answers to a) and b).
GEOINT Symposium 2019 Update
Takeaways

Career Opportunities (Full-Time/Internships)
- Submit opportunities for marketing to slawg@usgif.org for distribution

Events/Messaging
- Submit calendar events to Tara Mott
- Flashtalks for the Next Meeting?

**Members should look to join at least one sub committee and share GEOINT Opportunities!**
Next Meetings

• March 27th, SLU, Il Monastero Banquet Center, 3050 Olive St
  • 2 to 4 pm (free parking)

• April 24th, St. Louis Economic Development, Pierre Laclede Bldg, 7733 Forsyth, 22nd floor
  • 1 to 3 pm

• May 29th, T-Rex, 911 Washington Avenue
  • 3 to 5 pm

• June 26th, CIC, 4240 Duncan Ave, Havana – 2nd floor
  • 1 to 3 pm
Next Meetings

- July 31\textsuperscript{st}, TBD
- August 28\textsuperscript{th}, T-Rex, 911 Washington Avenue, 3 to 5 pm
- September 25\textsuperscript{th}, Clyde C. Miller Career Academy HS, 1000 N. Grand Blvd, 3 to 5 pm
- October 30\textsuperscript{th}, Taylor Community Science Resource Center (SLSC), 4900 Manchester Ave, 2 to 4 pm
- November 20\textsuperscript{th}, Herbert Hoover Boys & Girls Club, 2901 N. Grand Blvd, 1 to 3 pm