Affordable Geospatial Training Programs Offered by Academic Institutions & Other Organizations

Like many industries that have a technology-based engine, the geospatial workplace finds itself within a constantly changing environment. Whether upgrading software or hardware, introduction of technologies into the workplace (remote sensing, new programming tools and languages, web-based mapping applications), or restructuring and/or expanding the geospatial footprint within an organization, the geospatial worker may find her/himself a few steps behind the learning curve. Without having opportunities to stretch beyond their current understanding of this profession, the practitioner may become discouraged and apathetic. Geospatial technology is an exciting industry, but readily available education and training opportunities are crucial for wide systemic implementation.

Many colleges and universities now offer degrees in geospatial information science and technology. Both 2- and 4-year institutions provide classroom and online options for the geo-student. The online alternatives can be very effective for GIS professionals who are employed, but not near the educational institution. The list of institutions which offer these degrees and training grows every day. URISA will help institutions form curricula and will help direct members to high quality educational and training programs.

Short-term workshops and live seminars can also be an effective tool to increase the level of enthusiasm and training for the geospatial professional. Such events are great for learning new techniques, networking with other interested individuals and hearing of other technical advancements. Though location-dependent, such meetings can be spaced out (time and location) to reach a maximum number of participants. URISA will continue to create such workshops and refer members to high quality workshops developed by other organizations.

Using web-based technology, this outreach can be exponentially expanded. Live and recorded web-based seminars and classes can provide a very affordable and timely experience for the end user. During 2014/2015, Carolina URISA experienced good response from its members as it offered up to 20 free online instructional class modules. Affordable and accessible training to URIA Chapter members is a tangible and successful benefit and the level of response for Carolina URISA indicates the need and desire to participate in educational opportunities exists.

Increased understanding and acceptance of geospatial applications can also empower the general public. An example of this empowerment is a local government creating a web mapping application for the general public to access property information. With the use of the intuitive web mapping tools, the public no longer has to visit the local government mapping department to gather information. This in turns lessens the impact on government resources. After a while, the public expects such web-based applications from other units of government.

URISA strongly supports, and encourages all government and community leaders to support, the following actions:

a) Support GeoTech Center and others in developing affordable geospatial training
   - The GeoTech Center is a collaborative effort between colleges, universities and industry to expand the geospatial workforce
   - Each Chapter should maintain and provide a list of colleges and universities within their region that offer geospatial programs

b) Identify and promote open educational resources initiatives internationally, for example:
   - Erasmus Mundus Scholarship for Master Program Geospatial Technologies
   - Advance Africa

c) Promote more financial aid opportunities for part-time and non-traditional students
   - Promote and support Chapter driven scholarships for Geospatial students
   - Encourage and recognize employer based internships
   - Encourage and recognize employer support of continuing training for current geospatial employees
   - Promote Federal Student Aid, grants, loans and work study programs

d) Continue developing web-based curricula of URISA workshops and webinars
   - Professionally record, using proven web technology, each of the listed URISA workshops and provide access via the web
   - Transition existing URISA workshops to include interactive and collaborative online alternatives

e) Create web collaborations to extend reach of geospatial education beyond URISA
   - Partner and work with other vendors and geospatial education providers to provide access to web-based training to members at affordable prices
   - Engage the geospatial academic community to insure the latest concepts and technology are in the curriculum