NGA Sponsored Technical Sessions
American Society for Photogrammetry and Remote Sensing (ASPRS)
2011 Annual Conference, Milwaukee, WI
May 1 - 5, 2011

- Call for Papers -

The National Geospatial-Intelligence Agency (NGA) will be hosting technical sessions focusing on 4 key research areas shown below during the 2011 ASPRS Annual Conference. Each of the four topic areas will have a paper presentation session followed immediately by a roundtable discussion session on the same topic. These sessions will be held on May 3rd and 4th. Please go to: http://www.asprs.org/milwaukee2011 for complete schedule and registration information.

NGA Special Session I - Open Source Motion Imagery
May 3rd, Morning
The widespread availability of hand-held motion imagery (such as cell phone videos, laptop videos, FMV and others) has greatly expanded the volume of information that requires labor intensive analyst review, where timeliness is essential e.g. urban or wilderness rescue, or when seeking alternative avenues for discovery and confirmation. This session focuses on research that explores the value of using alternative open source motion imagery to discover location or patterns of human behavior and applies that knowledge to advance analysis. The “human dimension” includes organization, culture, knowledge, relationships, employment, social structure (e.g. clan/tribe), vulnerabilities, capabilities, motivation, intent, and activities. The research could include other data and knowledge types to include but not limited to biometrics, financial, cyber, social, anthropological, etc.

NGA Special Session II - Geospatial Visual Analytics
May 3rd, Afternoon
This session will focus on computational modeling of large datasets and their organizations for visual processing including but not limited to models of integrating human intelligence and decision–making into geospatial analysis and building the scientific basis for visual analytics, integration into time-space analysis, multi-level data, uncertainty analysis and human-computer interaction.

NGA Special Session III — Sparsity and Compressive Sensing
May 4th, Morning
This technical session will examine techniques and algorithms that exploit structure in the remotely sensed data, such data from LIDAR and hyperspectral sensors. Compressive Sensing is exploring new techniques to acquire and process large volume data. Sparseness has been used for de-noising, interpolation and in-painting, low-rank and manifold structure for joint tracking and background estimation and low-dimensional structure for fusion.

NGA Special Session IV — Tradecraft for Remote Sensing and Data Exploitation
May 4th, Afternoon
Geospatial analysis tradecraft traditionally includes 1) photogrammetry and geomatics, 2) remote sensing and imagery science, 3) geodesy and geophysics, 4) cartographic science, and 5) geographic information systems and geospatial analysis. With the increasing availability of commercial sensors and growing masses of data, this technical session will explore new core competencies and the
development of academic curricula and professional certification courses. These would serve as a basis for new tradecraft focused on future research challenges in remote sensing and data exploitation. Please allow for twenty to thirty minutes for each presentation. Papers and presentations should address on-going research or application in real world environments of work to exploit full motion video, advance activity-based intelligence, explore compressive sensing, and advance tradecraft.

** Please do not submit papers that focus on proprietary company or commercial products or services or use the presentations to promote or advertise a product, service, or company. **

Submission requirements:
Abstracts for papers must be received by **February 11, 2011**. Abstracts must be unclassified and include the presentation title, author(s)/presenter(s) with affiliations(s), and a description not to exceed 500 words. Abstracts will be evaluated on their descriptions and implications, relevance to session and community, and overall technical quality. Paper selection notifications will be made by **February 25, 2011**. If selected, full presentation or paper will be due to NGA on or before **April 22, 2011**.

Submit abstracts via Email to: narppo@nga.mil

- Call for Roundtable Participation -

A roundtable discussion will follow each of the presentation sessions to discuss and address key challenges and potential solutions on the four topics above. The purpose of these roundtable sessions is to engage participants in exploring the issues, the state-of-practice, state-of-research, views, ideas, approaches, solutions and future directions in each of these research areas. Please go to: [http://www.asprs.org/milwaukee2011](http://www.asprs.org/milwaukee2011) for complete schedule and registration information.

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