

ISIF CONFERENCE REPORT

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18TH FUSION IN WASHINGTON, DC

ISIF organized its 18th annual flagship conference last July in the capital of the United States of America. George Mason University's C4I and Cyber Center and IEEE's Aerospace and Electronic Systems Society co-organized the conference. In keeping with the international goals and purpose of ISIF, more than half of FUSION 2015's 389 attendees arrived in Washington, DC, from countries other than its host nation. This diversity highlights the broad appeal of the conference and the international community supporting it. The FUSION community has been experiencing steady growth throughout its already substantial history. One of the most impressive statistics in FUSION 2015 was the technical richness observed in its 12 tutorials, 282 presentations, and 3 keynote addresses, with a wide range of approaches, applications, and novel ideas covering all aspects of the information fusion spectrum.

Unbeknownst to the vast majority of its attendees are the hurdles and challenges involved in organizing such complex events, which range from tricky logistics to new government travel regulations to the high expectations created by the history of exquisitely organized FUSION conferences. We briefly address a few of these in this article.



Dr. Moshe Khan's plenary talk – The Impact of Sensor and Data Fusion Thought on Engineering Practice and Engineering Education.

TECHNICAL PROGRAM

All the conference activities occurred on a dedicated floor at the Grand Hyatt, which provided the focus and convenience to leverage the richness of the technical program. Activities started with twelve tutorials held on Monday, September 6, a day before the main conference, which lasted through Thursday. Coordinating four days of intense activities was a huge undertaking. In numbers, the FUSION 2015 technical program committee comprised 259 members, providing at least two expert reviews of each of the 357 submitted papers; many papers had more than two reviews. The result was a vibrant set of regular and special sessions, which were convened in the eight break-out rooms. A complete list of all 22 special sessions can be found on the conference website at fusion2015.org.

The conference proceedings were distributed to all attendees on site. They also have been published in IEEE Xplore, and are posted on the ISIF website for FUSION 2016 attendees. Further details of the conference, including a photo gallery of the events, can be found at fusion2015.org.

We are especially grateful to our plenary speakers whose keynote address on the mornings of the conference brought to conference attendees a rare mix of technical competence, experience, and passion for information fusion, and taking perspectives ranging from academia to industry to government. This year's speakers were:

- ▶ Moshe Kam, "The impact of Sensor and Data Fusion thought on Engineering Practice and Engineering Education, 1975–2015",
- ▶ Colleen Keller, "Bayesian Search for Missing Aircraft", and
- ▶ Edward Cope, "Integrative GEOINT Foresight: Fusion of Transdisciplinary Expertise via Visual Analytics, Models, and Collaborative Computing".

We thank them for sharing their unique spark of excitement to our technical program at the start of each day.

"The Fusion Conference series always provide a terrific value for us in industry as a means of keeping up-to-date with the latest and the greatest research in the field. Fusion 2015 excelled in that regard! The technical program was outstanding in both content and depth, covering an amazing spectrum of different areas of information fusion with valuable tutorials, vibrant keynote speeches, and an amazing array of regular and special sessions that left no stone unturned. I am a regular attendee and arrived in D.C. with pretty high expectations for Fusion 2015, but the technical program managed to surpass all of them."

José Brancalion – Embraer S.A.



Mahendra Mallick, Jean Dezert (President of ISIF for 2016), and Shozo Mori at the FUSION 2015 reception.

SOCIAL ACTIVITIES

Washington, DC is consistently cited as one of the most expensive cities in the US and in the world (e.g. <http://www.expatistan.com/cost-of-living/index>). One of the major challenges in the organization of FUSION 2015 was to design a social program that brings a sense of the finest DC has to offer, while avoiding the high costs of many of the most popular attractions. We were fortunate enough to secure attractions that met these criteria. The reception was housed at the Mansion on O Street, a unique blend of music museum, executive lodging, restaurant, retreat venue, B&B, tourist attraction, and treasure hunt locale. The building consists of a series of five interconnected townhouses and includes over 100 rooms with over 70 secret doors. It has been featured in the National Geographic Traveler and on the Travel Channel as an ever changing environment that “combines history, art and architecture to craft an exhilarating entertainment experience found nowhere else on earth”. Anecdotal feedback from attendees was consistent with this description.

“I live in the Washington, DC area for a long time, but the Fusion 2015 reception venue was an awesome surprise to me. A unique place with a cozy yet sophisticated atmosphere. What a wonderful event....”

KC Chang, Professor – George Mason University

Beyond the highly positive atmosphere of the reception, the most anticipated social event of the program was the Gala dinner, held at the National Portrait Gallery near the White House. Dinner was served in the Robert and Arlene Kogod Courtyard, an enclosed courtyard with an elegant glass canopy offering a uniquely sophisticated atmosphere. Before dinner was served,



Snapshot of the Gala Banquet. Standing: Sten F. Andler, Anne-Laure Joussemme, Valentina Dragos. Seated: Paulo C.N. Costa, Paulo C.G. Costa, Kathryn Laskey, and Max Krüger.

an awards ceremony recognized some of ISIF’s greatest contributors. Awards included the Pierre Le Cadre Award for the Best Paper of the conference, and the Tammy Blair Award for the Best Student Paper. A high note this year was the establishment of the new ISIF Lifetime Achievement Award. This award was presented to Dr. Yaakov Bar-Shalom. The awards ceremony was followed by a delicious dinner. The night’s main attraction was a 17-musician jazz band performing a range of numbers that covered various periods of American music.

“It is not every day one can enjoy great food and company within a reserved courtyard in a Smithsonian museum at the center of the US capital, including a live jazz band, a grand piano, and an exquisitely decorated setup. The Fusion 2015 gala dinner was indeed a memorable event.”

*Sten F. Andler, Professor of Computer Science
– University of Skövde, Sweden*

ORGANIZATION

The decision to host Fusion 2015 was made in the Spring of 2013. Although this might sound like plenty of time to plan the conference, the reality is that an event as large and complex as Fusion in any major (and expensive) city needs considerable lead time to line up the best selection of venues and secure favorable pricing. Most of the major FUSION 2015 contracts were either finalized or arranged in 2013. These included the venue (Grand Hyatt) and the gala dinner venue (Smithsonian National Portrait Gallery), although negotiations on details continued right up to the very day of the event. Fusion conferences now have a cycle of three years between approval and the event.

FUTURE

The driving force behind the FUSION conferences is the information fusion community. Not only have the members of our all-volunteer organizing committee played important roles in past FUSION conferences, but we have also relied on help from past organizers, ISIF Board of Directors members, and others with a genuine desire to see a successful conference. For good reason, the FUSION conferences have developed a hard-earned reputation for their combination of technical excellence, networking opportunities, and vibrant social programs. We learned from our “first-person perspective” in organizing this event that the commitment of the fusion community is deep and plays a

vital role in the conference’s success. We are grateful to everyone for their contributions to a successful FUSION 2015.

“The Fusion 2015 organizing team did an exceptional job of handling all aspects of the conference. Their hard work and dedication paid huge dividends with a conference that came off without a hitch. This year’s conference maintained the high standards that our community expects and looks forward to each year. All of the sessions contained high quality presentations; the venue was perfect; and the social events provided the perfect atmospheres for networking, enjoyment, and relaxation.”

Darin Dunham – ISIF President