

# INTRODUCTION TO THE ISSUE

## PERSPECTIVES MAGAZINE

Welcome to the sixth issue of *Perspectives* magazine! This issue is particularly special as it celebrates the 25th anniversary of the International Society of Information Fusion (ISIF), which has grown, matured, and expanded its scope to embrace new fields and research over the course of 26 conferences and 25 years.

It is my great pleasure to be your guide on this journey as you read these lines, possibly while attending FUSION 2023 in Charleston, South Carolina. The conference is returning to the birthplace of the Society, the United States, where the first FUSION conference took place in Las Vegas, Nevada in 1998.

We start this journey with Larry Stone (Metron, USA) and Keith Barron (Aurania, Canada), who take us on the path of Gold Cities. Their feature paper “Going for Gold: Finding Lost Gold Cities in Ecuador” tells a thrilling, successful story illustrating how Bayesian search theory methods were used to fuse old Spanish records and maps with modern geophysics and geochemistry to find the location one of seven “Gold Cities” of the 16th Century.

The second feature paper by Jim Llinas from the University at Buffalo presents ideas preparing the future. In his paper “Fusion Processes and Situation Control”, he highlights ISIF’s research heritage in situation assessment and proposes an expanded framework for situation control, allowing for more systemic research in the future.

The core of this issue is a dedication to the 25th anniversary of ISIF. I invite you to read the paper on how ISIF evolved over the years from nothing to its current state, written by Chee-Yee Chong with the ISIF Board of Directors, as well as reflections from ISIF presidents on their presidency term(s). Notably, this section features a series of short papers by nearly 20 authors, summarizing several key developments on specific topics related to advances in information fusion since the inception of ISIF. Their purpose is to present the reader with the main challenges pertaining to each topic and highlight the advances made over the last 25 years. They are not intended to be comprehensive survey papers, so the reference lists may not be exhaustive, and the content reflects the authors’ individual perspectives on the topic. As part of these key developments, a summary of the history of the Evaluation of Techniques for Uncertainty Representation is available in the section dedicated to Working Groups.

This 25th anniversary year is also the moment to pay tribute to departed Fusion Minds who have left a lasting impact,

inspired young ISIF members in their scientific pursuits, and supported ISIF in many ways over the years. A special thank you is extended to their colleagues, friends and family who shared words, photos, and emotions to immortalize them in this issue.



This issue concludes nicely with a very interesting review by Claire Laudy (from Thales, France) of the book *Misinformation and Disinformation: Detecting Fakes with the Eye and AI* by Victoria L. Rubin. You will also have the privilege of listening to Victoria Rubin as a keynote speaker at the FUSION 2023 conference.

In keeping with tradition, this issue features a report on the 25th FUSION conference, held in Linköping, Sweden in 2022. The general chairs Fredrik Gustafsson, Gustaf Hendeby (Linköping University, Sweden), and Terence van Zyl (University of Johannesburg, South Africa) deserve special appreciation for successfully returning the conference to almost normal physical attendance. Additionally, the ISIF Awards section recognizes the 2023 ISIF Lifetime of Excellence, Distinguished Service, and Young Investigator awards recipients, as well as the FUSION 2022 Best Paper and Best Student Paper awards. To keep the excitement alive, you are encouraged to flip through the pages to discover the awardees.

As you can imagine, the successful completion of this *Perspectives* Volume 6 issue would not have been possible without the contributions of the authors, the diligent reviews, and personal inputs of Associate Editors Lyudmila Mihaylova, Jesus García, Paulo Costa, Wolfgang Koch, Murat Efe, Emre Özkan, and the invaluable “lifetime guidance” of AEiC Roy Streit, the unwavering efforts of Production Manager Kristy Virostek in ensuring everything stayed on track, and the consistent support of Administrative Editor David W. Krout. I would like to express my deepest gratitude to Chee-Yee Chong for being our Guest Editor for *Perspectives* as we celebrate the 25th anniversary of ISIF. Between California, Hong Kong, and Egypt, he took time to write articles and coordinate the various contributions.

A sincere thank you to everyone for your dedication, ideas, and energy.

**Anne-Laure Jusselme**  
Editor-in-Chief  
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