



Ricardo Valerdi

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Birthplace: Ensenada, Mexico
Current Residence: Tucson, Arizona, USA

“We often forget that technology and people interact in unexpected ways.”

Domain: Defense and space

Years in systems engineering: 15

Year joined INCOSE: 2002

Roles in INCOSE: Board of directors (treasurer), founder and editor-in-chief of the “Journal of Enterprise Transformation,” and associate director for international outreach (Americas)

What do you think is the most valuable benefit of being an INCOSE member?

Like many graduate students in systems engineering, I was in search of an academic support network. INCOSE’s Systems Engineering and Architecting Doctoral Student Network (SEANET) provided this and so much more. Former INCOSE President Donna Rhodes set a vision and a plan for SEANET, which was a significant factor in my success as a doctoral student.

What is the first thing you’d work on if you were named lead systems engineer for the United States?

There would be a tremendous benefit in understanding the interaction between systems, in particular, the unintended consequences that arise from policy decisions. We often forget that technology and people interact in unexpected ways. A better understanding of how laws impact behavior would be a significant contribution of our profession to the quality of life.

Tell us about your “Science of Baseball” – What is it and why is it important?

The Science of Baseball is a creative way to address a national problem: the shortage of STEM workers. Our approach is to get young students (kindergarten through 12th grade) interested in math, science and engineering by appreciating the practical application of what they are learning in school. It is infinitely more interesting to learn statistics by analyzing baseball data than by working out abstract and meaningless examples. We have obtained funding from U.S. Major League Baseball teams including the Arizona Diamondbacks, Anaheim Angels, San Diego Padres, Colorado Rockies and Washington Nationals.