



Micah Sun

Student, Cornell University

Place of Birth: Taichung, Taiwan (Republic of China)

Current Residence: Ithaca, New York, USA

Domain: Mechanical/Aerospace

Year joined INCOSE: 2015

INCOSE honors: 2014 Johns Hopkins University / Applied Physics Laboratory

Alexander Kossiakoff Scholarship Winner

“I am working ... on systematic approaches and solutions to improve the nation’s energy infrastructure and demand problems.”

Please tell us about your research that won you the 2014 Johns Hopkins University / Applied Physics Laboratory Alexander Kossiakoff Scholarship.

I am working with Dr. David Schneider, who teaches Model Based Systems Engineering (MBSE) at Cornell University, on systematic approaches and solutions to improve the nation’s energy infrastructure and demand problems. We are gathering data on renewable energy plants (wind farm, solar farm, etc.) and working with construction engineers and logisticians to develop a policy and model to enlist manpower and experts in renewable energy development. Our main points of contact include NREL (National Renewable Energy Laboratory) and USACE (U.S. Army Corps of Engineers).

Why did you decide to pursue a degree in systems engineering? How do you think this will help you in your future career?

As a former Air Force intelligence analyst, my degree will help me think systematically about national security needs and problems and solve them through a multidisciplinary approach. My mechanical/aerospace background is useful in managing complex projects, especially in defense and aerospace. This degree is definitely an entry step; I still need to accumulate more experience and skills.

Tell us about your first INCOSE conference experience.

In January 2015, I attended the INCOSE International Workshop in Torrance, California, USA. I focused on the [Systems Science Working Group](#), discussing theoretical applications of systems engineering and attempts to generate unified theory behind the discipline. It was a great experience in dealing with ambiguity and uncertainty, trying to find out what more to discover and apply through systems engineering.

What do you think is the most valuable benefit of INCOSE membership?

INCOSE offers a chance to network and receive valuable information on the progress and contributions of systems engineering. There are many experienced professionals within the organization for collaboration and mentorship.

AN INSIDE PERSPECTIVE