COMING EVENTS

Tutorial
Friday September 26th
DOD Architecture Framework: Overview and Application Guidance
James Martin

Location
LA Airport Radisson Hotel

Dinner Meeting
October 14th
From Function Driven Systems Engineering to Object Oriented Software Engineering

Dr. Peter Hoffmann
I-LOGIX

ANNOUNCEMENT AND CALL FOR PAPERS

Abstract Submission Deadline: October 1, 2003

2nd Annual Collaboration
University of Southern California
Stevens Institute of Technology
CONFERENCE ON
SYSTEMS ENGINEERING RESEARCH
(Formerly Conference on Systems Integration)
April 14-16, 2004
Los Angeles, California
USC Campus
www.usc.edu/dept/engineering/cser

The conference theme is the definition of the frontiers of systems engineering research and applications in new directions to provide the robust development and management of future complex systems.

ABSTRACTS:
Abstracts must include: 1)Title, 2) Names of Authors and Affiliations, 3) Address for the Corresponding Author
Please send abstracts in Microsoft Word (not to exceed 400 words) to:

Dr. George Friedman, Conference Chairman;

gfriedma@usc.edu <mailto:gfriedma@usc.edu>

Key milestones:
Acceptance and Instructions: November 1, 2003
Camera-Ready Papers Due: March 1, 2004

LA CHAPTER ELECTIONS
It is time to gather nominations for the Chapter Board and Officers. The following positions are open for consideration:

Officers	**Board**
President	Membership
Vice President	SE Education (Tutorials)
Treasurer	Ways and Means
Secretary	Communications

If you would like to be considered or would like to nominate someone for any of these positions please send an email to the Chair of Nominating Committee Michael E. Krueger by September 12, 2003 - **Michael.Krueger@ase-consult.com**

Systems Engineering Education Opportunities from Southern California Universities

Michael E. Krueger
Past President and
LA Chapter Newsletter Editor

This is the third in a series of articles on University Systems Engineering Programs that have outreach programs to industry. Last month Newsletter, California Institute of Technology provided an overview of their Systems Engineering program that is offered its Industrial Relations Center. This month Dr. Frederick S. Brown provides an overview of Loyola Marymount's Masters program in systems engineering.

An Interdisciplinary Systems Engineering Graduate Program – A New Program for New Challenges

Not long into their careers, engineers find they must deal with a set of issues with rapidly increasing technical and management complexity. They are required to simultaneously bring electrical, mechanical, and software technologies to bear on solving a problem. And to do so on schedule and within budget. America's high-technology industry and government organizations are challenged by a critical shortage of systems engineers to lead the most demanding technical programs.

At the suggestion of local industry leaders, Loyola Marymount University (LMU) has developed an integrated, dual-degree program in systems engineering and business to deal with the challenges of systems integration. The result is the Systems Engineering Leadership Program (SELP) that awards two Master's degrees, one in Systems Engineering and one in Business Administration. This graduate educational combination is offered by no other university in the western United States – and sparingly elsewhere.

In developing the SELP, LMU benchmarked a number of interdisciplinary engineering/business programs across the U.S. The results clearly showed success requires three committed program directors: one each from engineering, business and industry. LMU's program has as its directors the Deans of the Colleges of Science & Engineering and Business Administration and a retired industry executive. The result is a program that meets industry's needs with a smooth and effective integration across the engineering and business educational interfaces.

The SELP graduates will be able to:
- Execute the SE discipline with excellence
- Lead an interdisciplinary team of engineering and business professionals
- Apply a solid foundation in business fundamentals.

INCOSE News

The program is designed for working professionals with all engineering and business courses offered in the evenings to accommodate full-time industry employees. All courses meet on LMU's Westchester campus. While the two-degree program can be completed in three years, it is flexible allowing students to proceed at their own pace. The SELP is non-cohort – students can enter in any semester, including summers, and select courses from the approved engineering and business curricula.

The SELP emphasizes:
- Systems engineering fundamentals and practice
- Systems management applications
- Lean program management and leadership
- Business skills for effective management
- Integrated team development
- Ethics in engineering and business

The program's faculty is a carefully selected mix of university and industry instructors who combine academic research and excellence with current industry issues in the curriculum. The dual-degree curriculum requires 66 semester-hours of coursework capped by a two-semester integrative project course, team taught by the engineering and business faculty.

A bachelor's degree in engineering or related science field and at least three years of working experience are required for admission to the program. The GMAT exam is required for admission to the MBA program.

Options are available for a stand-alone, 12-course MS degree in Systems Engineering and a three-course Certificate in Systems Engineering. The Certificate courses can be applied to the MS in SE degree upon admission to the program.

LMU is registering students for the start of the SELP with the Fall 2003 semester.

For more information, contact Dr. Fred Brown at 310-338-7878, e-mail: fbrown@lmu.edu. For admission information contact LMU's Graduate Division at 310.338-2721.

Dr. Frederick S. Brown, Ph.D. U. of Illinois, is the Graduate Director of Loyola Marymount University's Systems Engineering Leadership Program (SELP) and a Visiting Professor. Over the past 15 months, he has led the development of the SELP and provided the accompanying industry liaison. Dr. Brown is an experienced industry executive with a 35-year career (nine years at the VP level) in engineering program development, management, and execution at TRW. For several years, he led the corporate technical activities of TRW Inc., including those of the TRW Foundation as it placed grants in universities for research and new academic programs.

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Dinner Meeting
Tuesday, October 14, 2003

Location
Aerospace Corporation

Time
Networking 5:30 pm
Speaker 6:30 pm

Cost
Members Free
Guests $10.00

From Function-Driven Systems Engineering to Object Oriented Software Engineering
Dr. Hans-Peter Hoffmann
I-Logix

ABSTRACT: Establishing a seamless flow from "concept to code" to meet the ever-increasing competitive challenges of designing and developing large, complex systems is akin to the Holy Grail. Attempts to achieve this by imposing a single methodology for both the systems component and the software component - though logical from a theoretical point of view - has consistently made one group or the other unhappy.

This presentation describes a model-based system and software development process that combines both function-driven systems engineering and object oriented software engineering. The key part of this "Integrated Process" is the "Bridge" between the two paradigms.

BIOGRAPHY: Dr. Peter Hoffmann, Chief Methodologist for System Design at I-Logix, has over twenty years of experience in all phases of aerospace/defense and automotive systems development. A respected specialist in real-time systems design, Dr. Hoffmann is responsible for delivering senior-level consulting, mentoring, and training to embedded systems developers. Clients include Alenia, BAe, Boeing, Daimler Chrysler Aerospace (DASA), Eurocopter, General Dynamics, GIAT, JPL, Lockheed Martin, NASA and SAAB.

RESERVATIONS: You must RSVP to attend, NO EXCEPTIONS. RSVP via the INCOSE-LA website (www.incose-la.org) or to Paul Su (paul.k.su@aero.org, 310-336-2602) by October 10 if you are a US citizen, or by October 7 if you are NOT a US citizen.

FOR ADDITIONAL INFORMATION :
Please go to INCOSE-LA website (www.incose-la.org).

FOR DIRECTIONS:
Please go to www.incose-la.org then Calendar of events

* Tuesday, October 14 ....**The Aerospace Corporation**

TUTORIAL

DOD Architecture Framework: Overview And Application Guidance

HANDOUTS will be provided as part of this Tutorial

DATE

Friday, September 26, 2003 (Reservations by September 12)

TIME

9:00 AM to 5:00 PM; Registration begins at 8:30 AM

LOCATION

Radisson Hotel at Los Angeles Airport
6225 West Century Boulevard
Los Angeles, CA 90045
(310) 670-9000

This tutorial provides an overview of the DOD Architecture Framework. The tutorial will show how a systems architecture serves as the basis for development of a system. This approach leads to a more model-driven systems approach and allows you to "discover" the essential attributes of the problem space that must be addressed by the system solution. Architecture models are where these essential attributes are defined and evaluated. This approach to architecting will be described within the context of the DOD Architecture Framework and other frameworks like the Federal Enterprise Architecture Framework and the Zachman Framework.

The architecture provides the unifying structure (or roadmap) for exploration of the problem space and for characterization of the solution space such that better decisions can be made. This tutorial will describe an approach for the flow down from the system purpose or mission need, down through operational requirements and concept of operations, and finally into the operational, system, and technical views of the architecture.

The 26 products in the DOD Architecture Framework will also be described while highlighting the essential features of each. Finally, a strategy and approach for development of the standard framework products will be described.

LECTURER: James N. Martin

James N. Martin is an internationally known writer and lecturer on systems engineering. He wrote one of the most widely read books on systems engineering, "Systems Engineering Guidebook," published by CRC Press. His experience includes twenty years in systems development of telecommunications products and services (most of this with Bell Labs) as program manager, systems engineering manager, system architect, requirements manager, and lead systems engineer. His experience with technology includes mobile wireless, underwater fiber optics, satellite broadband wireless, reconnaissance sensors and distribution networks, and airborne network hubs.

Mr. Martin is currently employed by The Aerospace Corporation. He is a system architect for communications networks and space systems and teaches at The Aerospace Institute and at seminars around the world. He led the development of ANSI/EIA 632, the US national standard that defines the processes for engineering a system. Mr. Martin graduated with an MS from Stanford and a BS from Texas A&M. He is a Fellow member of INCOSE. He recently won an NRO Team Award for leading the architecture development effort for the Integrated Overhead Sigint Architecture.

REGISTRATION: **By September 12, 2003** Mail your registration to Saul Miller (mailing address and form are below).Checks must accompany the registration. Accommodations can be made for company checks. (go to website for registration form)

QUESTIONS: Saul Miller at 310-336-6869 or at Saul.Miller@aero.org

FEES: The fees for participants is $115 for members, and $145 for non-members. Make checks payable to "**INCOSE-LA**". Acceptable forms of payment are personal checks, bank drafts, and money orders. Credit cards and purchase orders are not accepted.
Mail completed form and check made out to "INCOSE-LA" to:
INCOSE-LA Chapter Tutorial
   c/o Mr. Saul Miller
   Aerospace Corporation
   P.O. Box 92957
   Mail Stop M4-916
   Los Angeles, California
   90009-2957

LUNCH: Continental Breakfast, and Lunch will be provided. If you have special dietary needs, please inform us of your preference.

REFUND POLICY: Substitutions are permitted until the day of the tutorial. Full refunds will be made prior to September 12. No refunds will be made after September 12. INCOSE-LA chapter reserves the right to cancel the tutorial with full refunds.

PARKING: A discounted rate of $5.00 for self-park and $7.00 for valet parking is available at the hotel

For additional information, Registration Form and Directions please visit the LA INCOSE Website www.la-incose.org and select **DOD Architecture Framework**.

The Board and Officers wish to welcome the following new Chapter members:

Carrie Bunce	Science and Technology International	Stan Settles	USC
Kerry Casler	Northrop Grumman	Mark Trent	The Boeing Company
Diane Lowry	JPL	Jeff Wessels	Northrop Grumman
Mike Martin	The Boeing Company	Steve Willigrod	Scitor Corporation

INCOSE News

The International Council on Systems Engineering (INCOSE) is an organization formed for the purpose of advancing the art and science of systems engineering in various areas of the public and private sectors. The Los Angeles Chapter meets several times per year for dinner meetings, and additionally sponsors tutorials and other activities of interest to those in the systems engineering field or related fields. L. A. Chapter Officers are as follows:

2003 Officers and Board

President:	Michael L. Dickerson	simimike@iname.com or	president@incose-la.org
Vice-President:	John Hsu	john.c.hsu@boeing.com or	vicepresident@incose-la.org
Past President:	Michael E. Krueger	michael.krueger@ase-consult.com or	pastpresident@incose-la.org
Treasurer:	Marsha Weiskopf	marsha.weiskopf@aero.org or	treasurer@incose-la.org
Secretary:	Paul Cudney	paulcudney@dslextreme.com or	secretary@incose-la.org
Membership:	Susan Ruth	susan.c.ruth@aero.org or	membership@incose-la.org
Programs/Speakers:	Gina Kostelecky-Shankle	Gina.M.Kostelecky@aero.org or	programs@incose-la.org
Ways and Means:	Thomas Kudlick	synchrocubed@aol.com or	waysandmeans@incose-la.org
Tutorials/Education:	Saul D. Miller	saul.miller@aero.org or	setraining@incose-la.org
Communications:	Ronald Williamson	ronald.w.williamson@aero.org or	communications@incose-la.org

Those interested in INCOSE membership wanting to be placed on our E-mail distribution please contact Susan Ruth - susan.c.ruth@aero.org
Newsletter Editor - Michael E. Krueger - michael.krueger@ase-consult.com