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SANTA BARBARA • SANTA CRUZ

Dear INFORMS Friends and Colleagues,

Welcome to the 2014 INFORMS Annual Meeting in San Francisco, the City by the Bay. The conference theme, "Bridging Data and Decisions," reflects the broad scope of what will be covered, from data analytics to new optimization and analysis methodologies to models and practical applications pertinent to numerous industries.

An unusually distinguished group of keynote and plenary speakers headlines the program:

- Nobel Laureate Alvin Roth, the Craig and Susan McCaw Professor of Economics at Stanford and the Gund Professor of Economics and Business at Harvard will give the opening address on "Market Design and the Economist as Engineer."
- Richard Cottle, Professor Emeritus of Management Science and Engineering at Stanford University, will offer a biographical perspective on George Dantzig to celebrate the 100th birthday of the father of linear programming.
- Omega Rho Lecturer Jonathan Caulkins, the H. Guyford Stever Professor of Operations Research and Public Policy at Carnegie Mellon University, will discuss "Operations Research in Service of Drug & Addictions Policy."
- IFORS Distinguished Lecturer Lyn Thomas, Professor of Management Science at Southampton Management School (UK) will offer lessons for OR modeling from the recent global financial crisis.
- Dimitris Bertsimas, Boeing Global Leaders for Manufacturing Professor of Operations Research and Statistics at MIT will give the Philip McCord Morse Lecture: "Statistics and Machine Learning via a Modern Optimization Lens."
- Anthony Levandowski, Product Lead for the Google Driverless Car Project, will share his experiences in developing and driving Google's self-driving car.
- Martin Haugh, Garud Iyengar, Kay Giesecke and Dimitris Bertsimas will provide perspectives on their experiences with Massive Online Open Courses (MOOCs) at Columbia University, Stanford and MIT.
- Mark Rothleder, Vice President for Market Quality and Renewable Integration at the California Independent System Operator, will discuss how optimization is used in managing the electricity grid.

Winners of the Franz Edelman, UPS George D. Smith and Daniel H. Wagner Prizes will also give presentations.

Please take advantage of the many opportunities to network – and eat – at the conference, including the Welcome Reception on Sunday evening and the General Reception on Tuesday evening.

I am grateful to the INFORMS Meetings Committee for their support, and for the dedication and effort of the INFORMS meetings staff, without whom this meeting would not have been possible. I also thank the "Local" organizing committee, including Phil Kaminsky, Shmuel Oren, Alexandra Newman, Janny Leung, Hyun-Soo Ahn, Damien Beil, Rachel Chen, Ana Muriel, Hari Balasubramanian, Theresa Roeder, Julia Miyaoka, Alper Atamturk, Max Shen, Vijay Mehrotra, Warren Lieberman, Thomas Olavson and Steven Nahmias, for their hard work.

We appreciate the generous support of our major sponsors: IBM, the Seth Bonder Foundation, FICO, AIMMS, Chevron, Caterpillar, City University of Hong Kong and the University of California at Berkeley.

Thank you for your participation. We hope you enjoy the conference, as well as the sights, sounds and flavors of San Francisco.

Candace Arai Yano

Candace Arai Yano, General Chair

KEY

H - Hilton
P - Parc 55

BADGES REQUIRED FOR TECHNICAL SESSIONS

INFORMS Annual Meeting 2014 badges must be worn to all sessions and events. Badges will be checked at the entrance to technical session areas, as well as the Exhibit Hall. Attendees without badges will be directed to the INFORMS registration desk to register and pick up their badges. *All attendees, including speakers and session chairs, must register and pay the registration fee.* Lost badges can be replaced at the registration desk for a fee of \$5.00.

QUICK REFERENCE

including the
Master Track Schedule & Maps

**Don't miss this handy reference.
It's a separate flyer that came
with the program.**

THANK YOU

INFORMS Colloquia Sponsors

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National University of Singapore
Dept. of Decision Sciences

FRIDAY, NOVEMBER 7

Combined Colloquium Dinner P - Market St., Level 3 6:00pm-8:00pm

SATURDAY, NOVEMBER 8

Registration H - Yosemite, BR Level 7:30am-5:30pm

Combined Colloquia

Breakfast

P - Embarcadero, Level 3 7:00am-8:00am

Doctoral Student Colloquium

P - Market Street, Level 3 8:00am-5:00pm

New Faculty Colloquium

P - Powell 1-2, Level 3 8:00am-4:30pm

Teaching Effectiveness Colloquium

P - Sutro, Level 2 8:15am-4:15pm

Meetings Committee

H - Imperial Suite 7:30am-11:30am

Data Mining & Analytics Workshop

H - Continental 1 & 2, BR Level 8:00am-5:00pm

CIST

Breakfast/Welcome

H - Golden Gate 8, Lobby 7:00am-8:00am

Sessions

H - Golden Gate 2 & 3 Lobby 8:00am-5:45pm

ISR Editors

H - Golden Gate 1, Lobby 8:00am-2:00pm

Organization Science Competition

H - Franciscan A, BR Level 8:30am-5:00pm

INFORMS Executive Committee

H - Presidio, Lobby 8:30am-12:00pm

Vendor Workshops - Session 1

ProbabilityManagement.org

H - Imperial B, BR Level 9:00am-11:30am

Vendor Workshops - Session 2

AIMMS

H - Union Square 18, Level 4 12:00pm-2:30pm

American Optimal Decisions

H - Union Square 15, Level 4 12:00pm-2:30pm

Cogentus

H - Union Square 16, Level 4 12:00pm-2:30pm

FICO

H - Union Square 19, Level 4 12:00pm-2:30pm

Gurobi Optimization

H - Imperial B, BR Level 12:00pm-2:30pm

Maximal Software

H - Union Square 14, Level 4 12:00pm-2:30pm

Responsive Learning Technologies

H - Union Square 23, Level 4 12:00pm-2:30pm

SAS

H - Imperial A, BR Level 12:00pm-2:30pm

SAS Global Academic

H - Union Square 20, Level 4 12:00pm-2:30pm

SAS, JMP Division

H - Union Square 24, Level 4 12:00pm-2:30pm

Vendor Workshops - Session 3

AnyLogic North America

H - Union Square 25, Level 4 3:00pm-5:30pm

Artelys

H - Union Square 15, Level 4 3:00pm-5:30pm

Forio

H - Union Square 16, Level 4 3:00pm-5:30pm

Frontline Systems

H - Union Square 18, Level 4 3:00pm-5:30pm

GAMS Development

H - Union Square 14, Level 4 3:00pm-5:30pm

IBM

H - Imperial B, BR Level 3:00pm-5:30pm

Imagine That

H - Union Square 19, Level 4 3:00pm-5:30pm

LINDO Systems

H - Union Square 23, Level 4 3:00pm-5:30pm

MathWorks

H - Union Square 20, Level 4 3:00pm-5:30pm

Statistics.com

H - Union Square 24, Level 4 3:00pm-5:30pm

INFORMS Board Meeting

H - Golden Gate 4-5, Lobby 12:00pm-5:00pm

INFORMS Membership Meeting/Reception

H - Imperial A, BR Level 5:00pm-6:00pm

INFORMS Roundtable

Reception

H - Golden Gate 8, Lobby 5:00pm-6:00pm

Meeting

H - Plaza A, Lobby 6:00pm-7:30pm

Dinner

H - Golden Gate 8, Lobby 7:30pm-9:00pm

ISS Awards & ISR Editors Reception

H - Plaza B, Lobby 6:30pm-8:00pm

SUNDAY, NOVEMBER 9

Registration
 INFORMS Roundtable
 Breakfast
 Meeting
 Lunch
 Roundtable/INFORMS Board
 President's Reception Roundtable
 New Member Breakfast
 Career Center Breakfast & Meeting

Technical Sessions (SA)

INFORMS Board
 CIST
 Breakfast
 Sessions
 Coffee Break

CIEADH

**Welcome/Plenary: Alvin Roth
 Technical Sessions (SB)**

ITOR Editorial Board
 Exhibits, Career Center
 Technology Center, Free Internet
 Lunch Break (on your own)
 Junior Faculty Interest Group Lunch
 M&SOM Associate Editors
 Omega Rho Lunch & Meeting

Technical Sessions (SC)

Plenary-Omega Rho: Jonathan Caulkins

Coffee Break

Technical Sessions (SD)

INFORMS Community Meetings
 Interfaces Editorial Board
 IOL & Social Networking Reception
 Welcome Reception-Exhibits Open
 Wharton Alumni Reception
 Minority Issues Forum Reception
 Awards Ceremony & Dessert Reception

Awards Ceremony open to all, doors close at 8:45pm.

H - Yosemite, BR Level 7:00am-5:00pm
 H - Plaza A, Lobby 7:00am-8:00am
 H - Plaza A 8:00am-4:30pm
 H - Plaza A 12:00pm-1:15pm
 H - Plaza A 4:30pm-5:30pm
 H - Golden Gate 4, Lobby 5:30pm-6:30pm
 H - Imperial A, BR Level 7:00am-8:00am
 H - Imperial B, BR Level 7:30am-9:00am
Hilton, Parc 55 8:00am-9:30am
 H - Golden Gate 4 & 5, Lobby 8:00am-3:30pm
 H - Golden Gate 2-3 Foyer 7:00am-8:00am
 H - Golden Gate 2 & 3, Lobby 8:00am-5:15pm
 H - Continental Ballroom Foyer 9:30am-10:00am
 P - Cyril Magnin Foyer
 H - Golden Gate 1, Lobby 10:00am-5:45pm
H - Continental 5-6, BR Level 10:00am-10:50am
Hilton, Parc 55 11:00am-12:30pm
 H - Seacliff, Lobby Level 12:00pm-1:30pm
 H - Grand Ballroom 12:00pm-5:00pm
 H - Grand Ballroom 12:00pm-5:00pm
 H - Grand Ballroom 12:30pm-1:30pm
 H - Grand Ballroom 12:30pm-1:30pm
 H - Grand Ballroom 12:30pm-2:30pm
 H - Grand Ballroom 12:30pm-3:00pm
 H - Imperial A, BR Level 1:30pm-3:00pm
 H - Imperial B, BR Level 3:10pm-4:00pm
 H - Marina, Lobby 4:00pm-4:30pm
Hilton, Parc 55
H - Continental 5-6, BR Level
 H - Grand Ballroom
 P - Cyril Magnin Foyer
Hilton, Parc 55 4:30pm-6:00pm
 See p. 9
 H - Seacliff, Lobby 6:15pm-7:15pm
 H - Golden Gate 5, Lobby 6:30pm-7:30pm
 H - Grand Ballroom 7:30pm-9:00pm
 H - Golden Gate 8, Lobby 7:30pm-9:30pm
 H - Golden Gate 3, Lobby 8:00pm-9:00pm
 H - Imperial Ballroom, BR Level 8:30pm-9:45pm

ESPECIALLY FOR STUDENTS

Coffee with a Member

This wonderful program connects INFORMS students with some of INFORMS most enthusiastic members for 15-minute impromptu meetings and some sage INFORMS advice. We know the Annual Meeting can be a bit overwhelming and are hoping these casual meetings will make students more comfortable, knowledgeable, and enthusiastic about both the meeting and INFORMS. Student attendees were offered the opportunity to sign up before the meeting on a first-come, first-served basis (it is not possible to sign up onsite in San Francisco). We will follow up after the meeting with a short survey to the students and members who participated to help us improve the program for future meetings.

PROGRAM FLIP BOOK KIOSKS

In an extended effort to go green, this year we are introducing kiosks to access a flip book of the full conference program. Two kiosks are located in the Exhibit Hall and one kiosk is located near INFORMS Registration.

QUICK REFERENCE

including the
Master Track Schedule & Maps

Don't miss this handy reference.
It's a separate flyer that came
with the program.

THANK YOU

Coffee Breaks Sponsor



香港城市大學
City University of Hong Kong

MONDAY, NOVEMBER 10

Registration
International Activities Breakfast
ACORD Breakfast & Meeting
Technical Sessions (MA)
Chapters/Fora Committee
Exhibits, Career Center
Technology Center, Free Internet
Section/Societies Committee
Decision Analysis Editors
Coffee Break

Keynote: Honoring George B. Dantzig

Keynote: 2014 Edelman Reprise

INFORMS Editors Panel-Trends in Research
Education Committee

Technical Sessions (MB)

Sections/Societies Officers Lunch
Lunch Break (on your own)
Bonder Scholarship Lunch
COIN-OR Members & Users
Service Science PhD Colloquium
SPSPN Lunch

Interactive Session

Publications/Editors in Chief
Fellows Lunch & Award Ceremony

Technical Sessions (MC)

Subdivisions Council

Keynote: Panel on MOOCs

Keynote: Mark Rothleder

Keynote: UPS George D. Smith Prize 2014

Coffee Break

Technical Sessions (MD)

Texas A&M Reception
University of Florida-ISE Reception
Carnegie Mellon Reception
INFORMS Community Meetings
University of California-Berkeley

University of Michigan Reception
University of Texas at Austin Reception
Cornell University Reception
Student Awards Ceremony
Student Reception

H – Yosemite, BR Level
H – Presidio, Lobby
H – Golden Gate 3, Lobby
Hilton, Parc 55
H – Golden Gate 4, Lobby
H – Grand Ballroom
H – Grand Ballroom
H – Golden Gate 5, Lobby
H – Plaza B, Lobby
H – Grand Ballroom
P – Cyril Magnin Foyer

H – Continental 5, BR Level

H – Continental 6, BR Level

H – Golden Gate 3, Lobby
H – Presidio, Lobby

Hilton, Parc 55

H – Golden Gate 5, Lobby

H – Golden Gate 2, Lobby

H – Continental 1, BR Level

H – Union Square 14, Level 4

H – Imperial A, BR Level

H – Grand Ballroom

H – Plaza B, Lobby

H – Plaza A, Lobby

Hilton, Parc 55

H – Golden Gate 1, Lobby

H – Continental 4, BR Level

H – Continental 5, BR Level

H – Continental 6, BR Level

H – Grand Ballroom

P – Cyril Magnin Foyer

Hilton, Parc 55

H – Golden Gate 1, Lobby

H – Golden Gate 3, Lobby

H – Golden Gate 2, Lobby

See p. 9

Kuleto's - Villa Florence Hotel
225 Powell Street

H – Golden Gate 4, Lobby

H – Golden Gate 6, Lobby

H – Golden Gate 5, Lobby

H – Plaza A, Lobby

H – Plaza B, Lobby

7:00am-5:00pm
7:00am-8:00am
7:30am-9:00am
8:00am-9:30am
8:30am-9:30am
9:00am-5:00pm
9:00am-5:00pm
9:30am-10:30am
9:30am-11:00am
9:30am-10:00am

10:00am-10:50am

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10:30am-11:30am

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6:00pm-7:00pm

6:00pm-7:30pm

6:00pm-8:00pm

6:30pm-9:30pm

7:00pm-9:00pm

7:00pm-9:00pm

7:15pm-9:15pm

7:30pm-8:00pm

8:00pm-9:30pm

TUESDAY, NOVEMBER 11

Registration
 Chapters/Fora Officers Breakfast
 Transportation Science Associate Editors
 DAS Strategic Planning
 Student Chapter Officers Meeting
Technical Sessions (TA)
 Exhibits, Career Center
 Technology Center, Free Internet
 MSOM EIC Orientation
 Meetings Committee
 Coffee Break

Plenary-McCord Morse: Dimitris Bertsimas

Operations Research Area Editors

Technical Sessions (TB)

Lunch Break (on your own)
 JOC Editorial Board
 Service Science Editors
 Women in OR/MS Lunch

Interactive Session

Technical Sessions (TC)

Keynote-IFORS: Lyn Thomas

Keynote: Anthony Levandowski

Coffee Break

Technical Sessions (TD)

Exhibitor and Future Committee Reception
 INFORMS Community Meetings
 Certified Analytics Professional Reception
 General Reception

WEDNESDAY, NOVEMBER 12

Registration
Technical Sessions (WA)
 Exhibits, Career Center
 Technology Center, Free Internet
 Coffee Break

Keynote: 2014 Wagner Prize Winner

Technical Sessions (WB)

Technical Sessions (WC)

Coffee Break

Technical Sessions (WD)

Technical Sessions (WE)

H - Yosemite, BR Level
 H - Imperial A, BR Level
 H - Seacliff, Lobby
 H - Plaza B, Lobby
 H - Imperial A, BR Level

Hilton, Parc 55

H - Grand Ballroom
 H - Grand Ballroom
 H - Sunset, Lobby
 H - Imperial Suite
 H - Grand Ballroom
 P - Cyril Magnin Foyer

H - Continental 5, BR Level

H - Seacliff, Lobby

Hilton, Parc 55

H - Imperial B, BR Level
 H - Seacliff, Lobby
 H - Plaza A, Lobby

H - Grand Ballroom

Hilton, Parc 55

H - Continental 5, BR Level

H - Continental 6, BR Level

H - Grand Ballroom
 P - Cyril Magnin Foyer

Hilton, Parc 55

H - Imperial A, BR Level
 See p. 9

H - Franciscan C, BR Level

H - Continental & Golden Gate Rooms

7:00am-5:00pm

7:00am-8:00am

7:30am-9:00am

7:30am-9:30am

8:00am-8:45am

8:00am-9:30am

9:00am-5:00pm

9:00am-5:00pm

9:00am-2:00pm

8:30am-5:00pm

9:30am-10:00am

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7:00am-4:30pm

8:00am-9:30am

9:00am-3:00pm

9:00am-3:00pm

9:30am-10:00am

10:00am-10:50am

11:00am-12:30pm

12:45pm-2:15pm

2:15pm-2:45pm

2:45pm-4:15pm

4:30pm-6:00pm

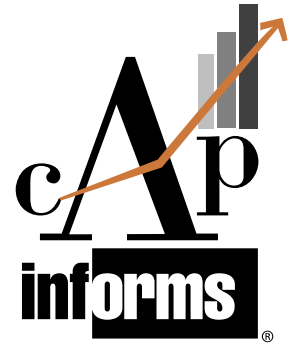


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BENEFITS OF CERTIFICATION

- Advances your career potential by setting you apart from the competition
- Drives personal satisfaction of accomplishing a key career milestone
- Helps improve your overall job performance by stressing continuing professional development
- Recognizes that you have invested in your analytics career by pursuing this rigorous credential
- Boosts your salary potential by being viewed as experienced analytics professional
- Shows competence in the principles and practices of analytics



APPLICATIONS

- Prepare to apply by reviewing Candidate Handbook & Study Guide Draft
- Arrange now to secure academic transcript and confirmation of "soft skills" to send to INFORMS

COMPUTER-BASED TESTING

It is now more convenient than ever to schedule your CAP exam in more than 700 Kryterion test centers in more than 100+ countries. To find the location closest to you, check this site: www.kryteriononline.com/host_locations/

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DOMAINS OF ANALYTICS PRACTICE

Domain	Description	Weight*
I	Business Problem (Question) Framing	15%
II	Analytics Problem Framing	17%
III	Data	22%
IV	Methodology (Approach) Selection	15%
V	Model Building	16%
VI	Deployment	9%
VII	Life Cycle Management	6%
		100%

*Percentage of questions in exam



The INFORMS Career Center offers employers expanded opportunities to connect to qualified O.R. and analytics professionals. INFORMS Career Center now offers a complete line of services to be used alone or in conjunction with the Job Fair at the 2014 Annual Meeting. Both give applicants and employers a convenient venue to connect. The Career Center is free to INFORMS member applicants.

**SEARCHING?
HIRING?
INFORMS
CAREER CENTER
is the place to be.**

- Hundreds of analytics jobs
- Preferred jobs
- Featured jobs
- Job alerts
- Anonymous career profiles
- Powerful searching capabilities
- Detailed career resources



For info on job fair at the 2014 INFORMS Annual Meeting,
<http://meetings.informs.org/sanfrancisco2014/jobfair.html>

SUNDAY, NOVEMBER 9

Information Systems
 Aviation Applications
 Data Mining & Artificial Intelligence
 Decision Analysis Society Council
 Energy, Natural Resources & Environment
 Forum on Education (INFORM-ED)
 Location Analysis
 Manufacturing & Service Ops. Mgt.
 Military Applications Society Board
 Minority Issues Forum
 Multiple Criteria Decision Making
 Optimization
 Railway Applications
 Revenue Management & Pricing
 Simulation
 Telecommunications
 Transportation Science & Logistics Board
 Women in OR/MS
 Revenue Management & Pricing Board

H – Golden Gate 2, Lobby	5:30pm-6:30pm
H – Continental 1, BR Level	6:15pm-7:15pm
P – Divisadero, Level 2	6:15pm-7:30pm
P – Powell 2, Level 3	6:15pm-7:30pm
P – Cyril Magnin 1, Level 4	6:15pm-7:15pm
P – Powell 1, Level 3	6:15pm-7:15pm
H – Union Square 6, Level 4	6:15pm-7:15pm
H – Continental 4, BR Level	6:15pm-7:15pm
H – Presidio, Lobby	6:15pm-7:15pm
P – Mason, Level 3	6:15pm-7:15pm
P – Sutro, Level 2	6:15pm-7:15pm
H – Plaza B, Lobby	6:15pm-7:15pm
H – Continental 2, BR Level	6:15pm-7:15pm
H – Franciscan C, BR Level	6:15pm-7:15pm
P – Cyril Magnin 3, Level 4	6:15pm-7:15pm
H – Union Square 16, Level 4	6:15pm-7:15pm
H – Union Square 1, Level 4	6:15pm-7:15pm
H – Continental 3, BR Level	6:15pm-7:15pm
H – Franciscan C, BR Level	7:15pm-8:15pm

KEY

H-Hilton
 P-Parc 55

**Business, Receptions
 and Networking...
 All Welcome!**

MONDAY, NOVEMBER 10

Public Programs, Services & Needs
 Analytics
 Applied Probability
 Computing
 CPMS Isolated Practitioners
 Decision Analysis
 eBusiness
 Financial Services
 Health Applications
 Military Applications
 Quality, Statistics & Reliability
 Social Media Analytics
 Technology Management
 Transportation Science & Logistics
 Behavioral Operations Management
 Military Applications Reception

H – Imperial A, BR Level	12:30pm-1:30pm
P – Cyril Magnin 3, Level 4	6:15pm-7:15pm
P – Market Street, Level 3	6:15pm-7:15pm
H – Continental 5, BR Level	6:15pm-7:15pm
P – Balboa, Level 4	6:15pm-7:15pm
P – Embarcadero, Level 3	6:15pm-7:15pm
H – Golden Gate 8, Lobby	6:15pm-7:15pm
H – Taylor B, Level 6	6:15pm-7:15pm
H – Continental 6, BR Level	6:15pm-7:15pm
H – Imperial B, BR Level	6:15pm-7:15pm
P – Divisadero, Level 2	6:15pm-7:15pm
H – Union Square 21, Level 4	6:15pm-7:15pm
H – Golden Gate 7, Lobby	6:15pm-7:15pm
H – Continental 4, BR Level	6:15pm-7:15pm
H – Union Square 25, Level 4	7:15pm-8:15pm
H – Imperial B, BR Level	7:15pm-10:15pm

TUESDAY, NOVEMBER 11

CPMS Council
 SpORts
 Service Science

H – Presidio, Lobby	7:00am-9:00am
H – Union Square 14, Level 4	6:00pm-7:00pm
H – Union Square 13, Level 4	6:15pm-7:15pm

SPEAKER GUIDELINES**Audio/Visual Equipment**

All session rooms will be equipped with a computer projector, but please note that you must provide your own laptop or pre-arrange to share with others in your session. Please follow these guidelines to ensure a successful presentation:

- Bring your laptop to your session. We recommend that you pre-arrange with other speakers in your session to ensure that at least one of you brings a laptop from which you can project your talks.
- Bring a power adapter with you. We recommend that you do not attempt to run your presentation off the laptop battery.
- If your laptop is not compatible with AC power, please bring an electrical adapter so that you can connect to U.S. electricity.
- If your laptop is an Apple product, you will need the appropriate adapter for the external video output.
- Arrive at your session at least 15 minutes before it begins. All presenters in a session should set up and test the connection to the projector before the session begins.
- We encourage speakers to put their presentations on a USB flash drive as a backup.

Presentation Guidelines

The room and location of your session are listed in the Technical Sessions section and in the Master Track Schedule. Please be on time for your session and check in with the session chair. Presentations should be limited to key issues with a brief summary. Time your presentation to fit within your designated time span and leave an opportunity for questions and audience participation. INFORMS does not produce proceedings with complete papers. To obtain complete copies of any papers abstracted in the program, please contact the authors directly at the address supplied with each abstract.

**For Questions about the Program:
Program Information Desk**

If you have general questions about the meeting and/or questions about your own presentation, stop by the Program Information Desk located in the Hilton near INFORMS Registration (in Yosemite B-C). We ask Session Chairs to notify the Information Desk about any changes or cancellations; these changes will be posted outside the meeting rooms.

**For Assistance during Your Session:
Session Monitor Desks**

Session Monitor Desks are located in several areas in both hotels (see maps on the Quick Reference guide for specific locations). If you have a problem in your session room related to AV needs or any other requests, go to the Session Monitor Desk in the area to ask for assistance.

Courtesy to Fellow Speakers

Attendees are asked to be respectful of their colleagues by turning off cell phones and mobile devices before the presentations begin. In addition, please note that use of cameras and all recording devices is prohibited during sessions unless you have received prior permission from the speaker.

SESSION CHAIR GUIDELINES

The role of the Chair is to coordinate the smooth running of the session. The Chair:

- Begins and ends the session on time. Each session lasts 90 minutes, with the time per presentation determined by the number of papers in the session. Equal time should be given to each paper.
- Introduces each presentation (just the title of the paper and the name of the presenting author).
- Ensures that presentations are made in the order shown in the program. This allows for "session jumping." If a speaker cancels or does not attend, the original time schedule should be adhered to rather than sliding every talk forward.
- Completes the session attendance forms (forms will be in the room).
- Reminds the audience to (a) turn off all mobile devices and (b) that photography is not allowed without the prior permission of the speaker.

THANK YOU**Conference Bag Sponsor****Badge Holder Sponsor****Student Volunteer T-Shirts Sponsor****Exhibits, Internet, Email**

Name badges must be worn for admittance to the Exhibit Hall, located in the Hilton, Grand Ballroom, during the following hours:

Sunday, Nov. 9	12:00pm-5:00pm 7:30pm-9:00pm Welcome Reception
Monday, Nov. 10	9:00am-5:00pm
Tuesday, Nov. 11	9:00am-5:00pm
Wednesday, Nov. 12	9:00am-3:00pm

Free wireless Internet and an email center are located at the back of the hall. There are a limited number of computers available in the email center if you do not have your own computer.

REGISTRATION**Badges Required for Technical Sessions**

INFORMS Annual Meeting 2014 badges must be worn to all sessions and events. Badges will be checked at the entrance to technical session areas, as well as the Exhibit Hall. Attendees without badges will be directed to the INFORMS registration desk to register and pick up their badges. All attendees, including speakers and session chairs, must register and pay the registration fee

Lost badges can be replaced at the registration desk for a fee of \$5.

Registration Fee

Your registration fee includes admittance to the complete technical program, the Exhibit Hall, Email Center and most special programs. The following social/food events are also included: Sunday evening Welcome Reception and Awards Ceremony, Tuesday evening General Reception, and all morning and afternoon coffee breaks. No other meals are included.

OTHER SERVICES**Business Center**

The business center in the Hilton is located near the hotel registration desk.

Luggage Check

A luggage check area will be located near the INFORMS Registration Desk later on Tuesday and on Wednesday.

Guest Registration

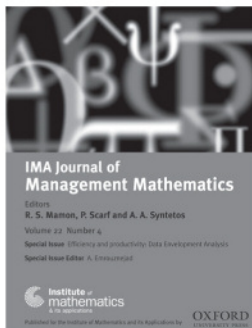
If your guest would like to accompany you to the major social events, you can purchase a guest registration (\$75) that covers admission to the Sunday Welcome Reception, Sunday Awards Ceremony and Tuesday General Reception. Guests are not eligible to attend the technical sessions. You can register your guest at the INFORMS Registration Desk.

San Francisco Visitor Information

Assistance is available with tourist information and directions at the Hilton and Parc 55 concierge desks.

EXCELLENCE IN EVIDENCE**IMA JOURNAL OF MANAGEMENT MATHEMATICS**

Edited by Rogemar S Mamon, Philip Scarf and Aris A Syntetos



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These events are located in the Hilton.

SATURDAY, NOVEMBER 8

INFORMS Membership Meeting & Reception

5:00pm-6:00pm

Imperial A, BR Level

The INFORMS Board of Directors encourages all members to bring their ideas, opinions and suggestions to this annual meeting. Current business and future directions for INFORMS are on the agenda. Wine and cheese will be served.

SUNDAY, NOVEMBER 9

New Member Welcome Breakfast

By Invitation Only

7:00am-8:00am

Imperial A, BR Level

New INFORMS members received an invitation for this welcome breakfast and a reminder is included in their registration packets. The session will feature a presentation on member benefits, a brief orientation for navigating the meeting, and a chance to relax and connect with colleagues. Representatives from INFORMS communities will facilitate networking tables where you can meet other members who share your professional interests.

Junior Faculty Interest Group Luncheon

12:30pm-1:30pm

Imperial A, BR Level

A limited number of tickets may be available on-site. Go to the INFORMS registration desk for information on availability. No tickets will be sold at the door. The winners of the 2014 JFIG Paper Competition will be presented with awards. All junior faculty are invited to participate. This event gives junior faculty in engineering and business schools the opportunity to discuss career development and exchange ideas.

Sponsored by Georgia Southern University, Texas A&M University, University of Arkansas, Dept. of Industrial Engineering, Wichita State University, University at Buffalo-Industrial and Systems Engineering.

INFORMS Online & Social Networking Reception

6:30pm-7:30pm

Golden Gate 5, Lobby

What's your social networking strategy for yourself or for INFORMS? We invite all contributors to IOL (the INFORMS website) and INFORMS social networking sites to come and meet face to face. Join us for refreshments and drinks - we are your INFORMS Online community!

Minority Issues Forum Reception

8:00pm-9:00pm

Golden Gate 3, Lobby

Come meet old friends and make new ones while talking about minority issues and other intellectual issues and opportunities. Posters submitted to the Minority Issues Forum Poster Competition will be on display during the reception.

Sponsored by Cornell University, North Carolina A&T State University (NCAT), North Carolina State University-Industrial and Systems Engineering, Texas A&M University-Industrial and Systems Engineering, and Clemson University-Dept. of Industrial Engineering.

MONDAY, NOVEMBER 10

COIN-OR Members & Users Meeting - Bag Lunch

12:30pm-1:30pm

Continental 1, BR Level

Anyone interested in open-source software tools, open standards, and data and model repositories for any aspect of operations research is encouraged to attend this Computational Infrastructure for OR (COIN-OR) meeting. Please bring your own lunch and ideas. For more information, visit www.coin-or.org.

SPPSN Lunch

12:30pm-1:30pm

Imperial A, BR Level

A limited number of tickets may be available on-site. Go to the INFORMS registration desk for information on availability. No tickets will be sold at the door.

This lunch and business meeting is open to members of the INFORMS Section on Public Programs, Service and Needs and also those who are interested in joining the section.

Sponsored by George Washington University, Dept. of Engineering Management and Systems Engineering and University of Michigan, Dept. of Industrial and Operations Engineering.

INFORMS Fellows Lunch & Awards Ceremony

By Invitation Only

12:45pm-2:30pm

Plaza A, Lobby

This luncheon honors INFORMS Fellows, examples of outstanding lifetime achievement in operations research and the management sciences. These individuals have demonstrated exceptional accomplishments and made significant contributions to the advancement of OR/MS over a period of time. Their service to the profession and to INFORMS has culminated in election to the INFORMS Fellow Award.

Class of 2014 Newly-Elected INFORMS Fellows:

Michel L. Balinski

Steve Nahmias

Jonathan Eckstein

Robert Phillips

Terry P. Harrison, CAP

Nikolaos Sahinidis

Robert R. Inman

Tuomas Sandholm

Radhika Kulkarni

J. George Shanthikumar

Russell P. Labe Jr., CAP

Candace A. Yano

Student Awards Ceremony & Student Reception

Awards Ceremony: 7:30pm-8:00pm

Reception: 8:00pm-9:30pm

Plaza A & B, Lobby

All students registered for the meeting are invited to attend the Student Awards Ceremony. The Chapters/Fora Committee will present the winners of the Student Chapter Annual Awards and the Judith Liebman Awards. Join us to recognize the great contributions of our most dynamic student volunteers. Plan to stay for the Student Reception, which immediately follows the ceremony.

The reception that follows the Student Awards Ceremony is open to all students - join us for an evening of food and drink, fun and networking. Come relax after a busy day of sessions and mingle with fellow students from universities around the world.

THANK YOU



TUESDAY, NOVEMBER 11

Women in OR/MS Forum Luncheon

12:30pm-1:30pm

Plaza A, Lobby

A limited number of tickets may be available on-site. Go to the INFORMS registration desk for information on availability. No tickets will be sold at the door.

All those interested in issues related to women professionals in OR/MS are invited to join us.

Sponsored by Arizona State University; Harvey Mudd College; Northwestern University; SAS; SIMUL8 Corporation; The Ohio State University; University of Massachusetts, Isenberg School of Business; University of Alabama; University of Arizona; University of California-Irvine; University of Florida; University of Michigan; University of Southern California; University of Tennessee; and University of Texas at Austin.

MOBILE APP

INFORMS is pleased to offer a free mobile app for smart phones and tablet users. Use the app to access conference information on the go, including the schedule of talks, maps showing meeting locations, exhibit details and much more. As this is a native app, you do not need an internet data connection to use it during the conference.



When you click on the Program button in the app, you can either browse through the parallel sessions and special events or search for a specific speaker or keywords. As you locate the events, sessions and presentations you are interested in, click on the star button which bookmarks it into the My List itinerary. Use My List for a quick reference tool.

- **Android Devices** - to download, go to the Google Play Store and search for INFORMS Mobile.
- **Apple Devices** - to download on either iPhone or iPad, go to the App Store and search for INFORMS Mobile.

Please Provide Your Input

We encourage you to complete the survey on the information screen of the main menu. The conference committee greatly appreciates your feedback on individual sessions and on the meeting overall.

Mobile App Information Desk

Visit the booth located next to INFORMS Registration in the Hilton, Yosemite, BR Level. We're happy to help you make the most of your INFORMS Mobile App experience!

ENGAGE WITH ONLINE TOOLS

Blogs

Check out the San Francisco 2014 web page for posts from our talented group of bloggers during and after the meeting:

Alan Briggs, CAP	David Morrison
Aaron Burciaga, CAP	David Morton
Marc-André Carle	Scott Nestler, CAP
Sertalp Çay	Patrick Noonan
Jim Cochran	Ranga Nuggehalli, CAP
Tapas Das	Paul Rubin
Walt DeGrange	Daniela Saban
Neil Desnoyers	Matt Saltzman
P.K. Kannan	Harrison Schramm, CAP
Burcu Keskin	Thiago Serra
Patrick Leach	Jay Sethuraman
Warren Lieberman	Dawn Strickland
Marco Lübbecke	Shiva Subramanian
Susan Martonosi	Mike Trick
Freeman Marvin, CAP	Jim Williams, CAP
Polly Mitchell-Guthrie	Tengjiao Xiao
Tarun Mohan Lal	Chun Ye

All attendees are welcome to blog. For instructions, email shirley.mohr@informs.org or drop by the INFORMS booths in Hilton Grand Ballroom A-B.

Join the Twitter Conversation

Add the hashtag #informs2014 to your tweets to associate them with the meeting. Tweets with #informs2014 will be displayed in the Attendee Twitter Feed on the homepage, along with official conference tweets that will alert you to late breaking information. If you haven't become a Twitter-ite but would like an introduction, stop by the INFORMS booths for a quick lesson.

Facebook

RSVP for the Annual Meeting and see which of your colleagues are attending. Go to our Facebook page and click through events to the INFORMS Annual Meeting page.

LinkedIn

Connect with other attendees on the Annual Meeting LinkedIn Group to discuss key topics. Go to the Annual Meeting website homepage to find a link leading to the Annual Meeting LinkedIn group.

Pinterest

Visit our Pinterest Annual Meeting Board to view a collection of fun things to do and see while visiting San Francisco. <http://www.pinterest.com/informs/2014-informs-annual-meeting/>.



YOUR BADGE IS YOUR TICKET

Wear your badge for admission to these events; your meeting registration fee includes these special receptions. If your guest would like to accompany you, a guest registration must be purchased (guests will receive a special badge). The \$75 guest fee includes the Sunday Welcome Reception, Sunday Awards Ceremony and the Tuesday General Reception.

SUNDAY**WELCOME RECEPTION & EXHIBITS**

7:30pm-9:00pm
Hilton - Grand Ballroom

INFORMS and the San Francisco Organizing Committee welcome you to the 2014 Annual Meeting with an evening of fellowship and fun. The Welcome Reception is the perfect venue to meet with colleagues and visit the exhibits. Light snacks will be served. Soft drinks are complimentary, with a cash bar for other beverages.

THANK YOU**Chinese University of Hong Kong**

Dept. of Systems Engineering
& Engineering Management

Rutgers University

Business School
School of Engineering

University of Illinois at Urbana-Champaign

College of Business at Illinois
Engineering at Illinois

Stanford University

Dept. of Management Science & Engineering

INFORMS AWARDS CEREMONY & DESSERT RECEPTION

8:30pm-9:45pm (Doors close at 8:45pm)
Hilton - Imperial Ballroom

The INFORMS Board of Directors invites you to honor and celebrate the achievements of our colleagues at the annual Awards Ceremony. You can attend the Welcome Reception first and then proceed to the Imperial Ballroom for the Awards Ceremony. Following the ceremony, you'll have an opportunity to congratulate the awardees at a special dessert reception.

These prestigious awards will be presented during the ceremony:

Saul Gass Expository Writing Award

Stephen Boyd, Stanford University

INFORMS President's Award

To be announced at the Awards Ceremony.

INFORMS Prize for the Teaching of ORMS Practice

Jason Merrick, Virginia Commonwealth University

George E. Kimball Medal

Terry P. Harrison, CAP, Pennsylvania State University

John von Neumann Theory Prize

To be announced at the Awards Ceremony.

INFORMS Impact Prize

Brenda Dietrich, IBM
JP Fasano, IBM
Lou Hafer, Simon Fraser University
John Forrest, IBM
Brady Hunsaker, Google
Laszlo Ladanyi, IBM
Robin Lougee, IBM
Ted Ralphs, Lehigh University
Matthew Saltzman, Clemson University

Bonder Scholarship for Applied Operations Research in Health Services

Jónas Oddur Jónasson, London Business School

Bonder Scholarship for Applied Operations Research in Military Applications

Jason Southerland, George Mason University

Four student awards will also be announced during the ceremony: the George E. Nicholson Student Paper Competition, the George B. Dantzig Dissertation Prize, the Doing Good with Good O.R. Student Competition and the Undergraduate Operations Research Prize.

THANK YOU

CATERPILLAR®

TUESDAY**GENERAL RECEPTION**

7:30pm-10:00pm
Hilton, Continental & Golden Gate Rooms

San Francisco is just as famous for its cuisine as it is for its cable cars and the Golden Gate Bridge. Join us as we serve up an eclectic menu showcasing the delectable fare the Bay area has to offer. This year's general reception will also feature a jazz band for entertainment, so dust off those dancing shoes! There will be a variety of food stations, along with complimentary soft drinks and a cash bar. This reception provides the perfect atmosphere for fellowship and networking, while also having a bit of fun after a long day of sessions.

THANK YOU

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Whether you work in industry, consulting or government – doing descriptive, predictive or prescriptive analytics/O.R. work, you'll find the best applications resources at the **INFORMS Annual Meeting**.

PLENARY AND KEYNOTE PRESENTATIONS

Operating the Grid

Mark Rothleder, Vice President, Market Quality and Renewable Integration, California Independent System Operator Corporation
Monday, 3:10pm-4:00pm; Hilton, Continental 5

IFORS Distinguished Lecture:

Credit Where Credit is Due: Lessons for O.R. Modelling from the Global Financial Crisis

Lyn Thomas, Professor of Management Science, University of Southampton
Tuesday, 3:10pm-4:00pm; Hilton, Continental 5

The Google Driverless Car

Anthony Levandowski, Project Leader, Google
Tuesday, 3:10pm-4:00pm; Hilton, Continental 6

AWARD WINNERS

Reprise of the 2014 Edelman Award-Winning Presentation

U.S. Centers for Disease Control and Prevention, with Kid Risk, Inc. - Polio Eradicators Use Integrated Analytical Models to Make Better Decisions

Sponsored by CPMS, The Practice Section of INFORMS
Monday, 10:00am-10:50am; Hilton, Continental 6

2014 INFORMS Prize Winner

Mayo Clinic - Sustained Excellence in Clinical Care, Research and Education Through Effective Integration of Advanced Analytics and O.R.

Amy Donahoe-Anshus, Mayo Clinic
Sunday, 8:00am-9:30am; Hilton, Continental 5, BR Level (MA08)

Innovative Applications in Analytics Award 2014 Winner Reprise

UNICEF Uganda, US Fund for UNICEF, and IBM Research - A SMS Text Classification System for UNICEF Uganda

Rick Lawrence, Manager, Machine Learning
IBM Research
Monday, 4:30pm-6:00pm; Parc, Market Street, Level 3 (MD77)
Sponsored by the Analytics Section of INFORMS and CPMS, The Practice Section of INFORMS

2014 Daniel H. Wagner Prize Competition

Sponsored by CPMS, The Practice Section of INFORMS
The Daniel H. Wagner Prize is awarded for a paper and presentation that describe a real-world, successful application of operations research or advanced analytics. Competitors for the 2014 prize include Intel, Sabre Holdings, Ford and Procter and Gamble.

Competition

Monday, Track 29 (MA, MB, MC); Hilton, Union Square 9, Level 4

Award Presentation & Winner's Reprise

Wednesday Keynote, 10:00am-10:50am; Hilton, Continental 5

ANALYTICS & PRACTICE TRACKS

These tracks showcase O.R. and analytics in practice at a wide range of companies and organizations. The presentations span the entire length of the meeting and include these topics and more.

Analytics in Government & Defense
Applications in Decision Making
Big Data Industry Applications
Cloud Analytics
Data Lifecycle
Data Networks
Healthcare Analytics
Predictive Analytics Models
Revenue Management
Supply Chain Operations
Transportation Analytics

Track 76, Parc-Mission, Level 4; Track 77, Parc-Market St., Level 3; Track 78, Parc-Mason, Level 3.

MORE ANALYTICS & PRACTICE SESSIONS

Software Demonstrations

Sunday-Wednesday
See pages 20-21 for details and room locations. These sessions feature applications you can use at work or in research. Learn about new product releases, case studies and software presented by leading vendors and solution providers.

Tutorials

Sunday-Wednesday
See page 27 for details. These 90-minute sessions offer an in-depth look at current methodologies. Topics include modeling choice, risk-averse optimization, simulation optimization, organ transplant operations, portfolio optimization and more.

NETWORKING

INFORMS Analytics Section Business Meeting & Reception

Monday, 6:15pm-7:15pm; Parc, Cyrin Magnin 3, Level 4
The Analytics Section invites all attendees to participate in the business meeting and reception. Enjoy light refreshments and listen to the officers discuss recent accomplishments of the section. Help chart the course for the future of the section.

CPMS Isolated Practitioner Workshop & Reception

Monday, 6:15pm-7:15pm; Parc, Balboa, Level 4
CPMS, The Practice Section of INFORMS, sponsors this workshop on topics of interest to isolated practitioners, the "Lone Rangers" of OR/MS. All are welcome to participate. Wine and cheese will be served.

Certified Analytics Professional Reception

Tuesday, 6:15pm-7:15pm; Hilton, Franciscan C, BR Level
Members of the INFORMS Certification Task Force will make a short presentation and answer questions related to the program.

SUNDAY

WELCOME & PLENARY

10:00am-10:50am
Hilton, Continental 5-6

Welcome

Stephen M. Robinson, President, INFORMS
Professor Emeritus, Industrial and Systems
Engineering, University of Wisconsin-Madison

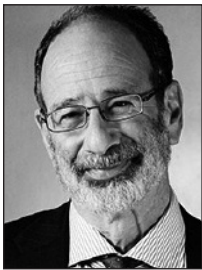
Candace A. Yano, General Chair, INFORMS Annual Meeting
Professor, University of California, Berkeley

Plenary

Market Design and the Economist as Engineer

Alvin E. Roth

Craig and Susan McCaw Professor of Economics,
Stanford University



Alvin E. Roth is the Craig and Susan McCaw Professor of Economics at Stanford University and the George Gund Professor Emeritus of Economics and Business Administration at Harvard. His research interests are in game theory,

experimental economics and market design. He is one of the founders and designers of kidney exchange in the U.S., which helps incompatible patient-donor pairs find lifesaving compatible kidneys for transplantation. Roth shared the 2012 Nobel Memorial Prize in Economic Sciences. He shared the 1990 Lanchester Prize with Marilda Sotomayor for their book *Two-Sided Matching: A Study in Game-Theoretic Modeling and Analysis*, and was a 2014 Edelman Award finalist. He is a member of the National Academy of Sciences.

PLENARY

OMEGA RHO Distinguished Lecture

3:10pm-4:00pm
Hilton, Continental 5-6

Operations Research in Service of Drug & Addictions Policy: Lessons from and for the Discipline of Operations Research

Jonathan P. Caulkins, H. Guyford Stever Professorship of Operations Research and Public Policy, Carnegie Mellon University

I am an OR missionary. I have carried our tools and perspectives into the fields of drug policy and addiction. When traveling far afield, one often encounters opportunities to do good by applying what seem to be quite basic precepts back home, and one returns with a deeper understanding of one's own culture and its strengths and weaknesses. That has certainly been true of my professional tour. I will share success stories – instances in which by virtue of being the only person thinking about an issue from the perspective of a math modeler, I was able to make fundamental contributions by doing analyses that anyone with training in OR would view as quite elementary. I will also try to share some insights into our disciplinary culture. Drug policy, like most policy domains, is inherently interdisciplinary. So I work with scholars from many disciplines. That experience has given me an appreciation of different disciplines' strengths and limitations when grappling with messy unstructured problems. I firmly believe that diversity is essential to good decision making, including disciplinary diversity. But I am also interested in which disciplines' graduates are leaders, not just members, of the teams that shape high-level and strategic decision making. I will close with some thoughts about how we might increase our discipline's "market share" within those leadership roles.



Jonathan P. Caulkins has been on the Heinz School faculty since 1990, with leaves of absence to be co-director of RAND's Drug Policy Research Center in Santa Monica, to found RAND's Pittsburgh Office, and to teach at Carnegie

Mellon's campus in Doha, Qatar. At the Heinz School he was director of the Masters of Science in Public Policy and Management (MSPPM) program and served as interim Associate Dean for Faculty. Caulkins serves or has served on the editorial board of *Management Science*, *Operations Research*, *Mathematical and Computer Modelling*, the *Journal of Drug Issues*, *Socio-Economic Planning Sciences*, and *I/S: A Journal of Law and Policy for the Information Society*, and has refereed for over 85 different journals.

OMEGA RHO

OMEGA RHO, the official Honor Society of INFORMS, was founded in 1976 to recognize superior scholarship and encourage leadership in operations research, management science, and related disciplines. The society has 40 active collegiate chapters, more than 5,000 student and faculty members and is a member of the Association of College Honor Societies. In addition to sponsoring OMEGA RHO Distinguished Lectures at INFORMS Annual and International meetings, OMEGA RHO provides financial support to the annual INFORMS Colloquium. Honorary Membership in OMEGA RHO is bestowed upon individuals who provide leadership and extraordinary support for the encouragement of operations research and management science through their professional activities. Prior to delivering the OMEGA RHO Distinguished Lecture, Jonathan P. Caulkins will be inducted as an Honorary Member of OMEGA RHO.

MONDAY

KEYNOTE

10:00am-10:50am
Hilton, Continental 5

Honoring George B. Dantzig at 100: Remembering the Dantzig Century

Richard Cottle

Professor Emeritus, Dept. of Management Science and Engineering, Stanford University

George Bernard Dantzig was born on November 8, 1914, one hundred years and two days before the delivery of this talk and the cluster of two sessions in his honor. The sessions are intended to highlight the continuing impact of several areas to which he contributed during his remarkably productive lifetime. This talk will complement these sessions and recount some of the biographical side of this great figure to whom we owe so much.

KEYNOTE

Reprise of 2014 Edelman Award-Winning Presentation

10:00am-10:50am
Hilton, Continental 6

U.S. Centers for Disease Control and Prevention with Kid Risk Inc. - Polio Eradicators Use Integrated Analytical Models to Make Better Decisions

Kid Risk, Inc.: Kimberly Thompson, Radboud J. Duintjer Tebbens
U.S. Centers for Disease Control and Prevention: Stephen L. Cochi, Mark A. Pallansch, Steven G. F. Wassilak

The U.S. Centers for Disease Control and Prevention, one of four spearheading partners of the Global Polio Eradication Initiative (GPEI) initiated a collaboration with Kid Risk, Inc. to develop and apply integrated analytical models to answer high-stakes policy questions related to managing the risks of polioviruses with consideration of human health and economic outcomes. Over the last decade, the collaboration innovatively combined numerous operations research and management science tools, including simulation, decision and risk analysis, system dynamics, and optimization to help policy makers understand and quantify the implications of their choices. These integrated modeling efforts helped motivate faster responses to polio outbreaks, leading to a global resolution and significantly reduced response time and outbreak sizes. Insights from the models also underpinned a global resolution to coordinate global cessation of the use of one of the two vaccines after wild poliovirus eradication (i.e., allowing continued use of the other vaccine as desired). Finally, the model results made the economic case for a continued commitment to polio eradication by quantifying the value of prevention and showing the health and economic outcomes associated with the alternatives. The work helped to raise the billions of dollars needed to support the completion of polio eradication that will prevent devastating cases of polio and enable realization of an estimated \$40 to \$50 billion in net benefits by the countries covered by the GPEI, while protecting the significantly larger net benefits enjoyed by the countries that stopped wild poliovirus transmission without support of the GPEI.

THE FRANZ EDELMAN AWARD

The Franz Edelman Award for Achievement in Operations Research and the Management Sciences calls out, recognizes and rewards outstanding, high-impact applications of OR/MS. Each year, six finalists compete in the "Super Bowl" of O.R. in practice. The 2014 finalists include Alliance for Paired Donation, The Energy Authority, Grady Health System, NBN Company and Twitter. In this keynote, the first-place U.S. Centers for Disease Control and Prevention team with Kid Risk, Inc. will reprise their winning presentation.

KEYNOTE

3:10pm-4:00pm
Hilton, Continental 4

Panel on MOOCs: Just a Fad or Here to Stay?

Moderator: Martin Haugh, Co-Director of the Center for Financial Engineering (CFE), Department of IE & OR, Columbia University

Panelists: Dimitris Bertsimas, Professor of Operations Research and Statistics, Massachusetts Institute of Technology
Kay Giesecke, Associate Professor of Management Science & Engineering, Stanford University
Garud Iyengar, Professor of Industrial Engineering & Operations Research, Columbia University
Soulaymane Kachani, Professor of Industrial Engineering & Operations Research, Columbia University

Massive open online courses or MOOCs have been the subject of considerable recent media attention, with some claiming they will revolutionize education and others claiming they are over-hyped and just a passing fad. Perhaps a middle ground is more appropriate? In this panel discussion we will hear the views of academics in the OR/MS community who have been involved in the delivery and/or teaching of MOOCs within their respective universities. In addition to sharing their experiences, they will attempt to answer questions on the future development of MOOCs as well as their impact on education and the lives and careers of people in the OR community. A question and answer session will be held at the end of the discussion.

KEYNOTE

3:10pm-4:00pm
Hilton, Continental 5

Operating the Grid

Mark Rothleder, Vice President
Market Quality and Renewable Integration
California Independent System Operator Corporation

The ISO manages the flow of electricity across the high-voltage, long-distance power lines that make up 80 percent of California's and a small part of Nevada's power grid. The nonprofit public benefit corporation safeguards the economy and well-being of 30 million customers by "keeping the lights" on 24/7. The ISO facilitates a \$10 billion electrical wholesale market. To efficiently and effectively manage the ISO wholesale market, the ISO utilizes sophisticated optimization techniques to: simultaneously balance supply and demand, allocate transmission, commit generating resources and procure operating reserves. These optimization routines produce a reliable dispatch plan and locational marginal prices used for settlement every day for the next operating days 24 hours. Routines also execute in real-time every five minutes for next two hour dispatch horizon. As California fulfills important environmental policies related renewable resources and the reduction of greenhouse gas emissions from the electric energy sector, the ISO leverages its optimization routines to help successfully achieve policy objectives. Starting in the fall of 2014, the ISO's energy imbalance market optimization routine is being offered to improve regional coordination, and provide economic benefits to interested neighboring balancing areas.



Mark Rothleder is Vice President, Market Quality and Renewable Integration at the California Independent System Operator Corporation and is leading the ISO's renewable integration work. He has held several

critical positions at the ISO after joining the grid operator as one of its first employees in 1997. In spring 2009, he led a multifunctional team in designing and implementing market rules and software modifications related to the ISO's Market Redesign and Technology Upgrade (MRTU). Rothleder holds a B.S. degree in Electrical Engineering from the California State University, Sacramento. He has taken post-graduate coursework in Power System Engineering from Santa Clara University and earned an M.S. in Information Systems from the University of Phoenix.

UPS GEORGE D. SMITH PRIZE

The UPS George D. Smith Prize recognizes an academic department or program for effective and innovative preparation of students to be good practitioners of O.R., management science or analytics. The UPS George D. Smith Prize is created in the spirit of strengthening ties between industry and the schools of higher education that graduate young practitioners of operations research. INFORMS, with the help of CPMS, awards the prize annually to an academic department or program for effective and innovative preparation of students to be good practitioners of operations research, management science or analytics. The UPS George D. Smith Prize is named in honor of the late UPS Chief Executive Officer who was a champion of operations researchers at a leading Fortune 500 corporation. UPS has generously underwritten the award in his memory.

KEYNOTE

Reprise of the 2014 UPS George D. Smith Prize

3:10pm-4:00pm

Hilton, Continental 6

Massachusetts Institute of Technology

Georgia Perakis, William F. Pounds Professor
Donald Rosenfield, LGO Program Director, 1988-2014

The MIT Leaders for Global Operations (LGO), partnership among global operations companies and MIT, trains students for careers in operations and manufacturing. The two-year dual-degree program includes a six-month research internship, on-site labs and in-depth partner company visits as well as on-campus coursework and results in an MBA or MS from the MIT Sloan School of Management and an MS from one of seven MIT engineering programs. During the internship, students work on an operations problem at one of 23 LGO partner companies and write a master's thesis based on their research and solutions. Courses in operations research and analytics are central to the LGO curriculum, which is based on the belief that deep knowledge of these fields is essential to achieving the best results for industry. MIT faculty members at the forefront of operations research and engineering practice serve as LGO teachers and thesis advisors.

TUESDAY

PLENARY

Philip McCord Morse Lecture

10:00-10:50am

Hilton, Continental 5

Statistics and Machine Learning via a Modern Optimization Lens

Dimitris Bertsimas, Professor of Operations Research and Statistics, Massachusetts Institute of Technology

Key problems of classification and regression in statistics and machine learning can naturally be formulated as mixed integer optimization (MIO) models. While continuous optimization approaches has had a significant impact in statistics, discrete optimization has played a very limited role, primarily based on the belief formed in the 1970s and 1980s that MIO models are computationally intractable and not practically relevant. While such beliefs were accurate then, in the last twenty-five years (1990-2014), algorithmic advances in integer optimization combined with hardware improvements have resulted in an astonishing 200 billion factor speedup in solving MIO problems. We develop discrete extensions of modern first order continuous optimization methods to find high quality feasible solutions that we use as warm starts to a MIO solver that finds provably optimal solutions. We report results for the classical best subset selection problem in linear regression currently solved by LASSO heuristically, least quantile regression, factor analysis and optimal CART. In all cases we demonstrate that the solutions found by modern optimization methods outperform the classical approaches in developing more interpretable models and providing stronger predictive power. This body of work collectively suggests that the belief widely held in statistics and machine learning that MIO is not practically relevant for statistics applications needs to be revisited.



Dimitris Bertsimas is the Boeing Leaders for Global Operations Professor and the Co-Director of the Operations Research Center at the Massachusetts Institute of Technology. His

research interests include analytics and their applications, especially in a variety of industries with particular emphasis in healthcare. He has co-authored more than 150 scientific papers and has co-authored three graduate level textbooks. He is a member of the National Academy of Engineering, has received several research awards including the Farkas prize (2008), the Erlang prize (1996), the SIAM prize in optimization (1996), the Bodossaki prize (1998) and the Presidential Young Investigator award (1991-1996).

KEYNOTE

IFORS Distinguished Lecture

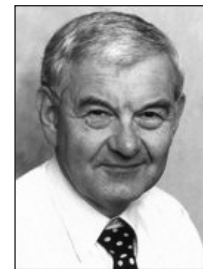
3:10pm-4:00pm

Hilton, Continental 5

Credit Where Credit is Due: Lessons for O.R. Modelling from the Global Financial Crisis

Lyn Thomas, Professor of Management Science, University of Southampton

Credit scoring, the operations research and statistical models used to assess the default risk in consumer lending, has proved essential to the growth in consumer credit experienced in the last fifty years. It has also seen the development of methodologies and ways of model assessment that have proved fundamental in data mining applications from prison parole to intensive care treatment. It is also an early example of the use of "quite big data." Initially credit scoring was used to ensure consistent and optimal accept/reject decisions when new customers requested loans. The approach was extended to assess the default risk of existing customers; to assess whether customers would pay off their loan early or move to other lenders; and to risk-based pricing. The advent in 2006 and 2013 of the Basel II and Basel III banking regulations meant scoring models became essential in setting the capital requirements of banks and this has introduced new areas of research. Yet credit scoring together with the models used by rating agencies to assess the default risk of portfolios of consumer loans are highlighted in the debate on the causes of the subprime mortgage crash and the subsequent global financial crisis. Identifying the performance of these models during this period leads to a number of lessons which are relevant to Operations Research modelling in many areas. These include whether models should be publically available and the need to recognize when the objectives of the model are no longer in line with those of the real problem.



Lyn Thomas has been Professor of Management Science at the University of Southampton since 2000. He was Professor of Management Science at the University of Edinburgh from 1985-2000. He served as President of the

Operational Research Society (1994-1995). Thomas is a fellow of the Royal Society of Edinburgh 1992, member of the EPSRC College (since 1995), and previously a member of the EPSRC Mathematics Committee and Chairman of the Operational Research Panel. He was a member of DSAC Operations Analysis Board (2001-2012).

KEYNOTE

3:10pm-4:00pm
Hilton, Continental 6

The Google Driverless Car

Anthony Levandowski, Project Leader, Google

The Google Self-Driving Car is a project by Google that involves developing technology for autonomous cars. The software powering Google's cars is called Google Chauffeur. Lettering on the side of each car identifies it as a "self-driving car." The talk will describe the status of the project and highlight the underlying technology and recent accomplishments.



Anthony Levandowski is a tech lead for Google's self-driving car project, where he oversees laser development and legislative efforts. He joined Google in 2007 to launch Street View, a technology featured

in Google Maps and Google Earth, which provides panoramic views from positions all over the world. After building Street View, He spearheaded the effort to mine Street View imagery and create the road network database that powers Google Maps, enabling for the first time free turn-by-turn navigation on all mobile phones. As a graduate student at the University of California, Berkeley, Levandowski led the team that created the world's first autonomous motorcycle, Ghost rider, which competed in a 2005 contest sponsored by the military's DARPA.

WEDNESDAY, OCTOBER 9

KEYNOTE

2014 Daniel H. Wagner Prize Winner Announcement and Reprise

10:00am-10:50am
Hilton, Continental 5

Daniel H. Wagner earned his PhD in mathematics from Brown University in 1951. He began his career in the US Navy's Operations Evaluation Group (OEG) at the Pentagon, where he worked on operations research for naval warfare. In 1963, he created the firm of Daniel H. Wagner Associates, Inc., which is still in existence today. During his years as president and principal owner of Wagner Associates, Dan brought many high-quality mathematicians into the operations research community. This led to significant advances in the firm's fields of endeavor and delivery of significant applications to the Navy, Coast Guard, and other clients; many of these applications are still in service today. After retirement from his eponymous company, Dan Wagner continued his commitment to the field of operations research, serving in various teaching and research positions with the US Naval Postgraduate School and the US Naval Academy. He was an active member of ORSA, and then INFORMS, for more than 40 years.

DANIEL H. WAGNER PRIZE

The Daniel H. Wagner Prize is awarded for a paper and presentation that describe a real-world, successful application of operations research or advanced analytics. The prize criteria emphasize innovative, elegant mathematical modeling and clear exposition.

INFORMS MEETINGS

2015

April 12-14

INFORMS Conference on Business Analytics & Operations ResearchHyatt Huntington Beach
Huntington Beach, CaliforniaChair: Manoj Chari, SAS
<http://meetings.informs.org/analytics2015>

June 14-17

CORS/INFORMS International ConferenceLe Centre Sheraton Hotel
Montreal, QC, CanadaChair: Louis-Martin Rousseau, CIRRELT, École
Polytechnique de Montréal
<http://meetings.informs.org/montreal2015>

July 29-31

INFORMS Healthcare ConferenceOmni Nashville
Nashville, Tennessee

Chair: Eric Johnson & Bob Dittus, Vanderbilt University

November 1-4

INFORMS Annual Meeting 2015 PhiladelphiaPennsylvania Convention Center & Marriott
Philadelphia Downtown

Chair: Tamas Terlaky, Lehigh University

INFORMS COMMUNITIES

2014

December 7-10

Winter Simulation ConferenceWestin Savannah Harbor Golf Resort & Spa
Savannah, GeorgiaChair: Stephen J. Buckley, IBM Research
<http://wintersim.org/2014>

2015

January 11-13

INFORMS Computing Society ConferenceOmni Richmond
Richmond, VirginiaChair: J. Paul Brooks, CAP
Virginia Commonwealth University
<https://sites.google.com/site/2015icsconference>

February 5-8

Organization Science Winter ConferenceCanyons Resort
Park City, UtahChairs: Sarah Kaplan & Dan Levinthal
<http://pubsonline.informs.org/page/orsc/winter-conference>

June 17-20

INFORMS Marketing Science ConferenceBaltimore Marriott Waterfront Hotel
Baltimore, MarylandChair: Dipankar Chakravarti
Dipankar.chakravarti@jhu.edu

July 5-8

19th Applied Probability Conference

Istanbul, Turkey

July 12-17

22nd International Symposium on Mathematical Programming (ISMP)Wyndham Grand Pittsburgh Downtown
Pittsburgh, PennsylvaniaChair: Francois Margot
<http://www.ismp2015.org>

TUTORIALS IN OPERATIONS RESEARCH

All attendees receive free online access to the *INFORMS 2014 TutORials in Operations Research: Bridging Data and Decisions* series volume concurrently with the meeting. 2014 INFORMS Annual Meeting attendees will have ONLINE access to the 2014 TutORials on November 1, 2014 (Members on January 1, 2015). Go to INFORMS PubsOnLine (pubsonline.informs.org) to access your content and view previous year's volumes. You will need your INFORMS customer account or your username and password found on your conference registration receipt; you can also request LOGIN information when you go to the TutORials PubsOnLine site. You can order the 2014 book or previous volumes through the TutORials website: <http://pubsonline.informs.org/series/educ>. For more information, visit the INFORMS booths #51-53 in the exhibit hall.

All tutorials are located in the Hilton, Continental 4, BR level.

SUNDAY

■ SA07

8:00am-9:30am

Using Complementarity Modeling for Planning and Policy Analysis of Electricity & Energy Markets

Ben Hobbs, Johns Hopkins University; Antonio J. Conejo, Ohio State University; J. David Fuller, University of Waterloo; Steven A. Gabriel, University of Maryland; Carlos Ruiz, Universidad Carlos III de Madrid

■ SB07

11:00am-12:30pm

Assessing and Improving Operational Resilience of Critical Infrastructures and Other Systems

Dave Alderson, Gerald Brown & Matt Carlyle
Naval Postgraduate School

■ SC07

1:30pm-3:00pm

From Data to Assessments and Decisions: Epi-Spline Technology

Johannes Royset, Naval Postgraduate School

■ SD07

4:30pm-6:00pm

Research in Public Health for Efficient, Effective, and Equitable Outcomes

Pinar Keskinocak, Turgay Ayer & Julie Swann
Georgia Institute of Technology

MONDAY

■ MA07

8:00am-9:30am

From OR to OM: Observations on the Emergence of a Discipline

John Buzacott, York University

■ MB07

11:00am-12:30pm

Clearing the Jungle of Stochastic Optimization

Warren Powell, Princeton University

■ MC07

1:30pm-3:00pm

Cloud Computing for Optimization

Jeff Linderoth, University of Wisconsin-Madison

■ MD07

3:00pm-4:30pm

Simulation-Based Education in Supply Chain and Project Management

Yale T. Herer, Avraham Shtub & Avinoam Tzimerman
Technion-Israel Institute of Technology

TUESDAY

■ TA07

8:00am-09:30am

Service Science: Toward Systematic Service System Innovation

Paul Maglio, University of California, Merced

■ TB07

11:00am-12:30pm

Cloud Computing and Decision Analytics

Stefan Voss & Leonard Heilig, University of Hamburg

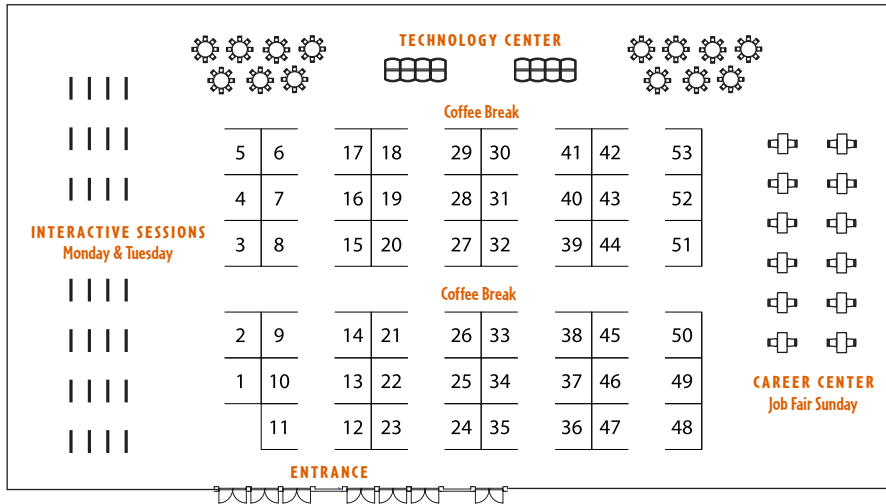
■ TC07

1:30pm-3:00pm

Identification, Assessment and Correction of Ill-Conditioning and Numerical Instability in Linear and Integer Programs

Ed Klotz, IBM

EXHIBIT HALL - HILTON GRAND BALLROOM A-B

**TECHNOLOGY CENTER****Free Wi-Fi**

Free wireless Internet and a technology center are located in the Hilton, Grand Ballroom. There are a limited number of computers available in the Technology Center if you do not have your own computer. Name badges must be worn for admittance. The Technology Center will be open during the following hours:

Sunday, Nov. 9	12:00pm-5:00pm
Monday, Nov. 10	7:00am-5:00pm
Tuesday, Nov. 11	7:00am-5:00pm
Wednesday, Nov. 12	7:00am-3:00pm

THANK YOU**INFORMS CAREER CENTER**

INFORMS Career Center (ICC) is the largest source of operations research and analytics jobs and resumes. It's where job seekers go to land the right job in academia or industry and where employers post their jobs and search our resume database for qualified candidates.

Job Fair

Sunday, 12:00pm-5:00pm
Hilton - Grand Ballroom

The Job Fair provides an opportunity for job seekers to meet participating employers in an informal atmosphere and to discuss employment opportunities within those organizations. Employers meet and collect resumes from many job seekers in a short period of time early in the meeting, giving them the chance to set up interviews during the meeting.

ICC On-Site Interviews

Monday-Tuesday, 9:00am-5:00pm
Wednesday, 9:00am-3:00pm
Hilton - Grand Ballroom

This service provides employers and applicants with a convenient venue for on-site interviews to explore opportunities in academia, industry and government.

In addition, the job placement service offers:

- Online access to job listings and applicant files,
- Expanded information about jobs and applicants,
- Weekly updates of the database,
- Improved database search capabilities,
- Online data entry for applicants and employers,
- Extended availability of the database. <http://career-center.informs.org>

Panel Discussions

Select panels will lead informal discussions about the industry and academic interview processes.

The Academic Job Search

Monday, 11:00am-12:30pm (TB65)
Parc 55 - Cyril Magnin 2, Level 4

The Industry Job Search

Monday, 1:30pm-3:00pm (TC65)
Parc 55 - Cyril Magnin 2, Level 4
Interactive Sessions

INTERACTIVE SESSIONS**Interactive Sessions**

Monday & Tuesday, 12:30pm-2:30pm
Hilton - Grand Ballroom

Interactive Session Chairs: Hari Balasubramanian & Ana Muriel, University of Massachusetts Amherst

Researchers, practitioners and students share their O.R. and analytics projects in these special sessions presented as poster displays, laptop demonstrations and other creative formats.

Abstracts and authors for posters are listed in the chronological program, under the day and time for each Interactive Session.
Monday, pages 185-190
Tuesday, pages 296-301

Interactive Competition

INFORMS places special emphasis on high-quality poster presentations. All interactive session presenters were invited to submit their posters to the competition. In Round 1 of the process, submitters sent a PDF of their finished poster to the judging panel for review. The judges have evaluated these submissions and selected a group of semifinalists. The judging panel is made up of distinguished ORMS professionals, both academics and practitioners, many of whom are INFORMS leaders.

Monday Judges

Dolores Romero-Morales
Erin Baker
Yao Zhao
Jennifer Ryan
Nick Petruzzi
Ana Muriel

Tuesday Judges

Bjorn Berg
Diana Negoescu
Anahita Khojandi
Jun Zhuang
Tahir Ekin
Jay Simon

In Round 2, the judging panel will review the semifinalist presentations during the Interactive Sessions in San Francisco. In Round 3, also held during the Interactive Sessions, the judges will name the 1st, 2nd and 3rd place winners. Three winners will be identified and awarded each day. Recognition includes a plaque, an award check, and announcements on the INFORMS website and in newsletters.

Exhibits Open

Sunday, Nov. 9	12:00pm-5:00pm 7:30pm-9:00pm (Welcome Reception)
Monday, Nov. 10	9:00am-5:00pm
Tuesday, Nov. 11	9:00am-5:00pm
Wednesday, Nov. 12	9:00am-3:00pm

AIMMS®

#27

www.aimms.com

AIMMS is an innovative technology company with offices in The Netherlands, Seattle, Singapore, and Shanghai. For 25 years, our award-winning optimization platform has helped Fortune 1000 companies create high business impact by informing better decision making for complex strategic, tactical and operational problems. AIMMS quickly and effectively delivers custom solutions that will impact every level of your organization and help you gain a competitive edge.

American Optimal Decisions

#13

www.aorda.com/aod/psg.action

American Optimal Decisions provides consulting services and software solutions in advanced statistics, optimization and risk management. The main software product is Portfolio Safeguard (PSG), an advanced nonlinear mixed-integer optimization package. Use simple codes for sophisticated optimization problems, calling non-linear functions without additional programming. Function groups: linear, nonlinear, utilities, cardinality, average, VaR, CVaR, and more. AOD provides consulting in various engineering areas involving statistics and optimization.

AMPL Optimization, Inc.

#15

www.ampl.com

AMPL Optimization develops, distributes and supports the AMPL modeling language, a powerful and natural tool for developing and deploying the complex optimization models that arise in diverse business applications. AMPL is notable for its convenient support of extended problem formulations and advanced algorithmic alternatives. It features an integrated scripting language for automating analyses and building iterative optimization schemes; links for reading and writing spreadsheet and database files; and application programming interfaces for use with popular programming languages. AMPL works with over 30 powerful optimization engines including well-known large-scale solvers such as CPLEX, CONOPT, Gurobi, KNITRO, MINOS, SNOPT and Xpress.

AnyLogic North America, LLC

#14

www.anylogic.com

AnyLogic simulation and modeling software is an essential productivity and decision making tool for your company's various needs. AnyLogic is the only simulation tool that supports all the most common simulation methodologies in place today: system dynamics, process-centric (aka discrete event), and agent-based modeling. The unique flexibility of the modeling language enables the user to capture the complexity and heterogeneity of business, economic and social systems to any desired level of detail. Join GE, PwC, Intel, IBM, Cardinal Health and other industry leaders who are using AnyLogic to leverage the power of dynamic simulation throughout their entire business lifecycle.

Artelys

#22

www.artelys.com

Artelys is an optimization and analytics company dedicated to providing decision-making solutions through technology, operations research and statistics. Artelys develops, distributes and supports a comprehensive portfolio of efficient and robust tools: Artelys Kalis, hybrid constraint programming and mixed-integer programming solver; FICO Xpress Optimization suite; KNITRO, nonlinear programming solver with extended features; and AMPL. Relying on these optimization tools, the state-of-the-art development and deployment platform Crystal, and a high level of expertise in quantitative methods, Artelys has been successful in delivering 100+ efficient solutions to the most complex business problems.

Cambridge University Press

#26

www.cambridge.org/us/academic

Cambridge's publishing in books and journals combines state-of-the-art content with the highest standards of scholarship, writing and production. Visit our stand to browse new titles, available at a 20% discount, and to pick up sample issues of our journals. Visit our website to see everything we do: www.cambridge.org/us/academic.

COIN-OR

#31

www.coin-or.org

The Computational Infrastructure for Operations Research publishes high quality, free, open source tools for O.R. professionals and students, suitable for commercial, educational and personal use. COIN-OR is the place to go when you need a "white box" for algorithm research and development. COIN-OR is a strategic partner of the INFORMS Computing Society.

Cogentus LLC

#47

www.cogentus.co.uk

Smart Decisions is unique software taking a full lifecycle view for solving a problem. It provides a robust, transparent "Record of Decision" and includes tools for problem definition, ideas generation (including Triz), MCDA and measures of effectiveness. We offer full training on the software and methodology plus consultancy to support Clients on technically complex and challenging problems particularly those with multiple stakeholder viewpoints with a high degree of uncertainty.

Decision Sciences Journal

#46

www.decisionsciencesjournal.org

The exhibit will feature the *Decision Sciences Journal*, the flagship publication of the Decision Sciences Institute, an interdisciplinary business research association dedicated to the quantitative analysis of managerial decision making. The journal is featuring a new section on Analytics and another new section on Methodological Best Practices. We wish to acquaint the INFORMS membership with this as well as other publication opportunities in this premier business research journal.

Dynamic Ideas

#42

www.dynamic-ideas.com

Dynamic Ideas is a publisher of scientific books that have quality and originality in the areas of Operations Research and Applied Mathematics. The key objective of our titles is to "educate the next generation." Many of our books are currently being used as the main textbook in academic courses in some of the finest universities and research institutions in the world.

Dynamic Ideas Financial

#40

411 Waverly Oaks Rd., Ste. 327

Waltham, MA 02452

www.dynamicideasfinancial.com**Elsevier**

#30

www.elsevier.com

Elsevier is a leading publisher of ORMS journals, including the *European Journal of Operational Research*, *Computers & Operations Research*, *Omega* and the *Journal of Operations Management*. Come to our booth to find out about our journals, how to publish open access including new OA journal *Operations Research Perspectives* and how to enrich your journal article with exciting innovations such as graphical abstracts, video and AudioSlides.

Exponent

149 Commonwealth Dr.
Menlo Park, CA 94025
www.exponent.com

Exponent is a leading engineering and scientific consulting firm providing solutions to complex problems. We offer expertise to serve clients at any and all stages of the empirical research process. Through analysis and synthesis of client-supplied data, combined with information from public sources, we help clients measure their own risk in the context of similar risks and determine appropriate courses of action. Our scientists have extensive experience in statistical/ biostatistical methods. These methods are applied to a wide range of applied and research health studies, including clinical investigations, epidemiologic studies, public health evaluations, health economics analyses, and other outcomes research.

FICO

www.fico.com/Xpress

FICO is a leading analytics software company, helping businesses around the world make better decisions that drive higher levels of growth, profitability and customer satisfaction. FICO's optimization tools, which include FICO® Xpress Optimization Suite, provide high-performance solvers, flexible modeling and application development tools. FICO's optimization capabilities are now available on the FICO® Analytic Cloud and the FICO® Decision Management Platform, an easy, cost-effective way to evaluate, customize, deploy and scale state-of-the-art analytics and decision management solutions. Learn more at www.fico.com/Xpress. FICO: Make every decision count™.

Forio

www.forio.com

Forio Epicenter lets you quickly build analytics applications such as forecasting tools or statistical analyses, as well as educational simulations or even games. Let your audience explore for themselves. Epicenter allows them to benefit from your analyses, even without a background in data analytics or modeling. If you need assistance building your analytics application, Forio can help you develop and deliver online forecasting tools, predictive analytics and training simulations. With our highly skilled staff of web and mobile interface developers, data visualization experts, user interface designers, modelers and QA testers, we can get your application running quickly.

#28

Frontline Systems, Inc.

www.solver.com

See Analytic Solver Platform, the surprisingly easy, surprisingly powerful integrated analytics software from Excel Solver developer Frontline Systems, the company that has "democratized analytics" for hundreds of thousands of users. Learn how quickly you can "come up to speed" and create data mining and forecasting models, simulation and risk analysis models, and conventional and stochastic optimization models, for fastest time to business value—in Microsoft Excel or a Web browser, or in your favorite programming language. See how you can use our analytics engines to deliver results in your consulting practice, or your company's own Web-based or desktop applications.

GameLab Ltd.

www.gamelab.cl

We are a technological company that produces digital games for courses at universities, primary MBAs. Our games seek to motivate students and to create a dynamic environment, converting the class into an unforgettable experience... by playing!

GAMS Development Corp.

www.gams.com

The General Algebraic Modeling System (GAMS) is a high-level modeling system for mathematical programming and optimization. It consists of a language compiler and a stable of integrated high-performance solvers. GAMS is tailored for complex, large-scale modeling applications, and allows you to build large maintainable models that can be adapted quickly to new situations. Come to our booth to learn more about our new GAMS distribution or ask for an evaluation license. You can also visit our technology workshop or software demo.

Gurobi Optimization

www.gurobi.com

Gurobi Optimization provides high performance LP, QP, QCP, and MIP solvers using the most advanced implementations of the latest algorithms. We offer best-in-class performance, support a broad range of interfaces and modeling languages, and offer flexible licensing together with transparent, no surprises, pricing, all backed by outstanding, easy to reach support.

#11

IBM

www.ibm.com/optimize

IBM CPLEX® has helped more organizations drive performance improvements from optimization than any other company, including 4x as many Edelman Award finalists. Practitioners can rely on CPLEX for prescriptive analytics to deliver bottom-line impact, leveraging big data and analytic insights to support decision making at the speed of business. Visit booths 43-44 to learn how Decision Optimization with CPLEX helps businesses make better decisions, faster.

IEOM Society

www.iieom.org

The IEOM Society is designed to encourage critical thinking in the field of Industrial Engineering (IE) and Operations Management (OM); provide means to communicate and network among people enthused with similar interests through yearly conferences, seminars and workshops across the globe; and illustrative research publications to disseminate the earned knowledge and experience. The IEOM Society and IEOM 2015 Conference will be promoted. The IEOM 2015 Conference is sponsored by INFORMS.

Imagine That, Inc.

www.extendsim.com

Simulation is a key technology to understanding business processes and identifying opportunities for improvement. ExtendSim helps guide decision making by simulating processes and determining the best system configuration. ExtendSim features a customizable graphical modeling logic where relationships between modeling components are visible. Its flexibility provides the ability to create and couple hierarchical subsystems, design interactive user interfaces, and freedom to rapidly explore design options. ExtendSim's robust data storage and manipulation tools put you in control of model information, facilitating organization of complex data.

INFORMS

www.informs.org

Visit INFORMS booth/bookstore to meet and speak with INFORMS staff about our products and services. Learn more about INFORMS journals and magazines, member benefits and services, CAP certification, continuing education, communities, upcoming meetings, networking opportunities (INFORMS Connect), and our new journal *Strategy Science*. INFORMS staff is available to assist you with purchasing products, or renewing memberships and will have the latest information about INFORMS newest member benefits. We look forward to seeing you!

#43-44

#39

#34

#9

#24

#20

#51-53

#1-2

#32

**INFORMS Analytics Maturity Model
Official Launch**

#38

<https://analyticsmaturity.informs.org/>
INFORMS, your trusted professional association, now brings you a new, thorough way to reassess the way that your organization uses analytics and plan even better ways to improve. Visit with INFORMS staff and the development team from Accenture, FICO, ORTEC, Spinnaker and CANA Advisors. Try out the new maturity model. Bring your questions and share your expert recommendations. But first visit <https://analyticsmaturity.informs.org/>.

LINDO Systems, Inc.

#23

www.lindo.com
LINDO Systems offers three products hooked to industrial strength solvers for linear, integer, stochastic, NLP and global solvers. See the latest solver enhancements including exploitation of multicore hardware. LINGO includes a powerful modeling language and convenient data options to make building models faster and easier. What'sBest! allows you to build large optimization models in Excel. Models are easy to build and understand for anyone comfortable within Excel. LINDO API allows you to plug the power of the LINDO solvers right into customized applications that you have written. Stop by the booth for a free trial CD with full capacity versions.

Lumina Decision Systems

#1A

26010 Highland Way
Los Gatos, CA 95033
www.lumina.com
"Everything that's wrong with the common spreadsheet is fixed in Analytica," according to PC Week. Analytica is an ideal environment for teaching decision support, decision analysis and optimization. Analytica offers influence diagrams to build and navigate models, Intelligent Arrays to handle multi-dimensional models with ease, fast Monte Carlo to cope with risk and uncertainty, and powerful optimization. You can instantly deploy your models to the web for end users and online collaboration. Cubeplan builds on Analytica to provide agile planning for large organizations.

MathWorks

#17

www.mathworks.com
MATLAB is a platform for analysis, visualization, simulation, and optimization. You can access and analyze real-world data and develop customized algorithms that help make better decisions. Join us to see what's new and how MATLAB can help you explore data, develop algorithms, and integrate programs into enterprise applications.

Maximal Software, Inc.

#29

www.maximalsoftware.com
Maximal Software is a leading provider of software for developing and formulating models in the field of optimization.. Organizations need to make intelligent decisions to obtain optimal use of their available resources, such as manpower, equipment, raw materials and capital. The discipline of optimization is used to assist organizations with solving their complex business problems in areas such as manufacturing, operations planning, distribution and transportation, supply-chain, finance, and defense related industries. Maximal is the developer of the MPL Modeling System and the OptiMax Component Library, and has many years of practical experience providing innovative solutions to our customers.

MOSEK ApS

#18

www.mosek.com
MOSEK ApS provides optimization software that helps our clients to make better decisions. Our customer base consists of financial institutions and companies, and engineering and software vendors, among others. MOSEK ApS was established in 1997 by Erling D. Andersen and Knud D. Andersen. It specializes in creating advanced software for solution of mathematical optimization problems. In particular, the company focuses on solution of large-scale linear, quadratic and conic optimization problems.

North Carolina State University

#4

<http://engineeringonline.ncsu.edu>
The College of Engineering offers 21 master degree programs and 13 PhD programs on campus through a variety of rich learning and work experiences on campus. Professional engineers and computer scientists can participate in the college's Engineering Online program and take classes for professional development or towards the completion of one of the 15 online master degree programs available for distance students. For more information visit these websites:
www.engr.ncsu.edu
<http://EngineeringOnline.ncsu.edu>.

North Carolina State University

#5

<http://www.ise.ncsu.edu/>
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- Provalis Research** #37
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- Responsive Learning Technologies** #41
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Green Room, GB Level.

SUNDAY

■ SA56

8:00am-8:45am

ProbabilityManagement.org The SIPmath™ Modeler Tools

Sam L. Savage, CAP, Executive Director
savage@stanford.edu

8:45am-9:30am

IBM Decision Optimization IBM Innovations that Simplify Application Development

John Chaves, IBM Decision Optimization Solutions
Architect
john.chaves@us.ibm.com

■ SB56

11:00am-11:45am

GameLab LTD. GameLab: from Classroom to Playground

Bernardo K. Pagnoncelli, Creative Director
bernardo.pagnoncelli@uai.cl

11:45am-12:30pm

SAS Institute Inc., JMP Division Interactive and Visual Data Analysis with JMP 11 Pro

Walter Teague, Marketing Manager, JMP Life Sciences
walter.teague@jmp.com

■ SC56

1:30pm-2:15pm

AMPL Optimization Inc. Building AMPL Models into Your Applications

Robert Fourer, President
4er@ampl.com
Victor Zverovich, Software Developer

2:15pm-3:00pm

GAMS Development Corp. Model Building and Deployment with GAMS

Steve Dirkse, Director of Optimization
sdirkse@gams.com

■ SD56

4:30pm-5:15pm

Responsive Learning Technologies Online Games to Teach Operations and Supply Chain Management

Sam Wood, President
wood@responsive.net

5:15pm-6:00pm

Provalis Research How to Analyze Big Text Data with Text Analytics Tools

Normand Peladeau, President & CEO
npeladeau@provalisresearch.com

MONDAY

■ MA56

8:00am-8:45am

AnyLogic North America AnyLogic Demonstration

Nikolay Churkov, Head of Development
nikolay@anylogic.com

8:45am-9:30am

Imagine That Inc. ExtendSim Simulation Software

Dave Krahl, CAP, Technology Evangelist
marketing@extendsim.com

■ MB56

11:00am-11:45am

AIMMS Bringing Optimization to the Enterprise with AIMMS PRO

Deanne Zhang, Senior AIMMS Optimization Specialist
d.zhang@aimms.com

11:45am-12:30pm

LINDO Systems, Inc. Optimization Modeling Made Easy

Mark Wiley, VP Marketing, mwiley@lindo.com
Gautier Laude, Software Development Manager

■ MC56

1:30pm-2:15pm

Maximal Software, Inc. Server-Based Version of the MPL Optimax Component Library

Bjarni Kristjansson, President
bjarni@maximalsoftware.com

2:15pm-3:00pm

Ziena Optimization LLC See the New KNITRO SQP Algorithm in Action

Richard Waltz, President
waltz@ziena.com

■ MD56

4:30pm-5:15pm

Statistics.com XLMiner V2015: Text Mining, Ensemble Methods, Feature Selection and More

Peter Bruce, President, Statistics.com
peterbruce@statistics.com
Daniel Flystra, President, Frontline Solvers

5:15pm-6:00pm

ARTELYS Corp. Artelys Crystal Super Grid, a Power Systems Modeling Software for Cost-Benefit Analysis of Energy Projects

Guillaume Tarel, VP
guillaume.tarel@artelys.com

TUESDAY

■ TA56

8:00am-8:45am

MathWorks MATLAB: An Environment for Operations Research and Data Analytics

Seth DeLand, Product Marketing Manager
seth.deland@mathworks.com

8:45am-9:30am

MOSEK ApS What's New in MOSEK 7.1

Andrea Cassioli, Product Manager
andrea.cassioli@mosek.com

■ TB56

11:00am-11:45am

Frontline Systems, Inc. Analytic Solver Platform: Integrated Data Mining, Simulation and Optimization in Microsoft Excel

Daniel H. Fylstra, President
daniel@solver.com

11:45am-12:30pm

Gurobi Optimization, Inc. Using Multiple Machines to Solve Models Faster in Gurobi 6.0

Edward Rothberg
COO & Co-founder
rothberg@gurobi.com

■ TC56

1:30pm-2:15pm

**Syncopation Software
Decisions Large and Small, Made Faster
and Better with DPL**Chris Dalton, CEO
cdalton@syncopation.com

2:15pm-3:00pm

FICO**Optimization on the FICO® Analytic Cloud**Oliver Bastert, Product Management Director
oliverbastert@fico.com

■ TD56

4:30pm-5:15pm

SAS**Building and Solving Optimization Models
with SAS**Ed Hughes, SAS/OR Product Manager; Rob Pratt,
SAS/OR R&D Manager
ed.hughes@sas.com

5:15pm-6:00pm

**American Optimal Decisions
Portfolio Safeguard (PSG): Advanced Nonlinear
Mixed-Integer Optimization Package**Stan Uryasev, Consultant
uryasev@aorda.com**WEDNESDAY**

■ WA56

8:00am-8:45am

Cogentus**Smart Decisions End-to-End Problem Solving**Ian Seed, VP Cogentus LLC
iseed@cogentus.co.uk

8:45am-9:30am

No session.

■ WB56

11:00am-11:45am

SAS® Global Academic**SAS Visual Analytics**Michael Speed, Analytical Consultant
mike.speed@sas.com
Tom Bohannon, Analytical Consultant

11:45am-12:30pm

Forio**Publishing Interactive Analytics or Operations
Research Models on the Web**Michael Bean, President
mbean@forio.com**informs**®443.757.3500 or
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Jose Guajardo
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100th Birthday & His Influence on MS/OR**

Richard W. Cottle
Stanford University

Cognitive Analytics

Meinolf Sellmann
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Mohamed Mostagir
University of Michigan

Kostas Bimpikis
Stanford University

Data Envelopment Analysis

Andrew Johnson
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Operations Research Practice**

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Daniel H. Wagner Associates, Inc.

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