

INDUSTRIAL AND SYSTEMS ENGINEERING

MID-YEAR UPDATE SPRING 2015



Successful 2014 Paves Way to New Year

Dear Friends,

Welcome to a new year! I hope that you all had a wonderful holiday season with your loved ones! As we begin 2015, I'd like to take the time to wish you much success in all your endeavors and give you a sample of the many great achievements along with faculty additions and promotions within the ISE Department in 2014.

The year as a whole was outstanding! The department did exceptionally well in student enrollment. ISE now lists 180 undergraduates, 220 Master's students, and 45 Ph.D. students. This shows continuous growth from previous years.

As noted in the annual newsletter, Katya Scheinberg was promoted to Full Professor and was also appointed as the Harvey E. Wagner Endowed Faculty Chair. Along with these two honors, Katya has been appointed as ADVANCE Chair for 2014-2015.

In October, Ted Ralphs has been promoted to Full Professor. Ted was also one of the recipients of the 2014 INFORMS Impact Prize.

Yang Dong '14 submitted her paper to the "Best Student Research Paper Award" competition of the Financial Services Section of INFORMS at the 2014 Annual Meeting and received an honorable mention. Congratulations to Yang!

ISE Department Mid-Year News

Department Chair:
Dr. Tamás Terlaky
terlaky@lehigh.edu

Associate Chair:
Dr. George Wilson
grw3@lehigh.edu

Editor:
Abby Barlok
acb213@lehigh.edu

ISE Department Staff:
Ed Force
Building Manager
ewf1@lehigh.edu

Rita Frey
Graduate Coordinator
rrf0@lehigh.edu

Kathy Rambo
Department Coordinator
kgr0@lehigh.edu

Reader Feedback:
Please send comments to editor,
Abby Barlok, at acb213@lehigh.edu

I am honored to announce the Van Hoesen family endowment that has established "The Annual Van Hoesen Family ISE Best Publication Award" that goes towards elevating the profile and visibility of the ISE Department. It aims to motivate faculty and students at all levels to publish high impact research, software tools and applications. The award will be presented for the first time April 16, at the 2015 ISE Banquet.

Dr. Radhika Kulkarni, Vice President of Advanced Analytics R&D at SAS Institute Inc., was our Spencer C. Schantz Distinguished Lecturer in the Fall. It was a pleasure having Radhika as a guest lecturer and hearing about her expertise in the field of software development.

I am pleased to announce that the Spring Spencer C. Schantz Distinguished Lecturer will be Dr. Egon Balas, University Professor of Industrial Administration and Applied Mathematics, The Thomas Lord Professor of Operations Research at Carnegie Mellon's Tepper School of Business and the recipient of the ISE Distinguished Alumni Award is Andy Greenawalt '76G, '04P, Dell Computer Corporation.

As we look forward to the new year, I am pleased to announce that I will be chairing the 2015 INFORMS Annual Meeting in Philadelphia from November 1-4. Other faculty representing Lehigh in the Organizing Committee are: Larry Snyder (Program Co-Chair), Ted Ralphs (Sponsored Sessions Co-Chair), Aurelie Thiele (Tutorials Co-Chair) and Katya Scheinberg (Keynote Co-Chair).

In cooperation with Distance Education, we are transforming Mohler Lab room 451 into a distance education enabled classroom, which will increase our technology resources, enabling us to deliver our masters programs online, and to attract a new array of students.

As always, we appreciate the kindness of our alumni. I humbly ask that you help us with our ISE Advanced Computing Technology Endowment, which allows our students and faculty to have the best computing and technology facilities to further assist with their courses and research. Any commitment is greatly appreciated!

All the best,



Tamás Terlaky
Terlaky@lehigh.edu

INFORMS Awards 2014 Impact Prize to the Open Source Software Project COIN-OR

The Institute for Operations Research and the Management Sciences (INFORMS) recognized a long-standing open source software program with its 2014 INFORMS Impact Prize for the developers' creation of software that has spurred the growth of new applications over its more than dozen years of existence.

The Computational Infrastructure for Operations Research (COIN-OR) initiative was launched at the 2000 International Symposium on Mathematical Programming as a three-year experiment by IBM Research. In 2004, a nonprofit corporation was formed to take over this initiative. It has grown from an initial four software projects to more than 50 projects spanning much of computational operations research.

Software supported by COIN-OR has been an essential part of hundreds of peer-reviewed research papers and is embedded in dozens of software systems, including the most widely used environments for performing analytics.

The prize recipients are Brenda Dietrich, IBM; JP Fasano, IBM; Lou Hafer, Simon Fraser University; John Forrest, IBM; Brady Hunsaker, Google; László Ladányi, IBM; Robin Lougee, IBM; Ted Ralphs, Lehigh University; and Matthew Saltzman, Clemson University.

The INFORMS Impact Prize awarded once every two years, is intended to recognize contributions that have had a broad impact on the field of operations research.



The 2014 INFORMS Impact Prize Winner(s) gather at the annual meeting in San Francisco to receive their prize.

Faculty Updates



Katya Scheinberg, promoted to Full Professor in the ISE Department, in addition has been appointed as ADVANCE Chair for 2014-2015.

Dr. Scheinberg has also been appointed as the Harvey E. Wagner Endowed Faculty Chair. Professor Scheinberg joined the ISE department in 2010. A native from Moscow, she earned her Master's degree in operations research from the Lomonosov Moscow State University in 1992 and then received her Ph.D. in operations research from Columbia University in 1997. After graduation, she worked at IBM's T.J. Watson Research Center.



Ted Ralphs has been promoted to Full Professor. Ted, along with Spring 2014 Spencer C. Schantz Distinguished Lecturer, Brenda Dietrich, IBM (and a few others) was a recipient of the 2014 INFORMS Impact Prize. Dr. Ralphs received his B.S. and M.S. in Applied Mathematics from Carnegie Mellon University in 1991. He then completed his Ph.D. in Operations Research at Cornell University in 1995.

Student Achievements

ISE Department's INFORMS Student Chapter Wins Award

We are excited to announce that the ISE Department's INFORMS Student Chapter has won the annual Cum Laude Award in recognition for outstanding participation and performance during the year of 2013! The purpose of the new Student Chapter Annual Awards is to recognize achievements of individual student chapters.

The ISE INFORMS Student Chapter representatives in 2013 were: Onur Babat, Mark Bai, Pelin Cay, Wei Guo, Matt Menickelly, Mohsen Moarefdoost, Xi Bai and Tengjiao Xiao

Congratulations to the representatives noted above, along with the previous leaders of the ISE INFORMS Chapter for their contributions in building this excellent community.

Yang Dong Wins Honorable Mention at Best Student Paper Competition

Dr. Yang Dong, '14 submitted her paper, "Robust Investment Management with Uncertainty in Fund Manager Asset Allocation" to the "Best Student Research Paper Award" competition of the Financial Services Section of INFORMS at the 2014 Annual Meeting and received an honorable mention.

Yang graduated from Lehigh in Summer 2014 with a Ph.D. in Industrial Engineering and now presently works for JP Morgan.



Lehigh's ISE Ph.D. students Sertalp Cay, Pelin Cay and Onur Babat accepted the award at the 2014 INFORMS Annual Meeting in San Francisco.

The ISE Advisory Council Welcomes its Newest Member

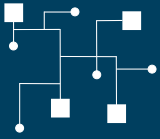


Kathleen Taylor '87 is the newest addition to the Industrial and Systems Engineering Department Advisory Council. Kathleen graduated from Lehigh in 1987 with a B.S. in Industrial Engineering. She has had a 27 year career with Johnson and Johnson, beginning as a manufacturing supervisor in Somerville, NJ. Kathleen gained experience through a variety of manufacturing and engineering roles in Somerville, NJ, Albuquerque, NM, and Cincinnati, OH. In addition to working in several US locations, she has worked in Mexico as a Plant Manager in Ciudad Juarez and as the Managing Director in Neuchatel, Switzerland. Following 23 years in the medical device sector of J&J she returned to the US as the Vice President of the Chemical API Global Platform for Johnson & Johnson Pharmaceutical sector where she was responsible for 6 sites across the US, Europe, and Australia.

Currently she is the Vice President of the Johnson & Johnson Production System. Her team is responsible for developing and deploying standard supply chain practices and business processes across the Johnson & Johnson manufacturing sites.

During her time at Lehigh, Kathleen was a member of Gamma Phi Beta sorority and played both lacrosse and softball as well as powder-puff football.

Kathleen currently resides in Solebury, PA with her husband and two sons.



2014 Fall Spencer C. Schantz Lecture Series

Dr. Radhika Kulkarni, Vice President of Advanced Analytics R&D at SAS Institute Inc., was the ISE Department's 2014 Fall Spencer C. Schantz Distinguished Lecturer. Dr. Kulkarni began her career as an academic at the University of North Carolina at Chapel Hill where she was a visiting professor. Radhika admits she has a strong love for teaching /working with students and enjoys being able to witness their growth. While working on her Ph.D., she believed she would always stay in the academic field.

That was until she began working at SAS Institute Inc., where she started as a developer and has climbed the ladder to her present position of Vice President of Advanced Analytics R&D, where she is responsible for software development in Statistics, Operations Research, Econometrics, Forecasting and Data Mining. In addition, her Division is also responsible for providing key components of business analytics solutions in several areas including Finance, Retail, Marketing, Hospitality and Supply Chain.

Radhika feels blessed to have "landed in one of the really unique jobs in the field of operations research." Through her work, she's able to help in the creation of software used in numerous businesses, industries and universities. Radhika says, "SAS is very passionate about supporting universities, and four or five times every year I am able to spend time at different universities talking about what I do." As a result, she gets the best of both worlds.

One of Radhika's early consulting projects was the "space launch vehicle project" for Lockheed Martin. She explains the tedious data manipulation involved from design to launch. Lockheed Martin used SAS software to decrease the cycle time of this process from 4 years to 14

months. Over the years her team has been involved in many challenging consulting projects for several of the Fortune 100 companies in addition to building a comprehensive analytics software product portfolio. When asked to be the Distinguished Lecturer at Lehigh, Radhika admits "I was very nervous, but extremely honored to have this opportunity." The visit with several faculty members and students was a rewarding experience with ideas for continued collaboration between Lehigh University and SAS Institute.

Besides working, Dr. Kulkarni enjoys spending time with her husband and three sons, traveling and reading novels (from mysteries to thrillers to romance).



Radhika Kulkarni, SAS Institute, Inc., presents her public lecture, "Succeeding with Business Analytics - Key Challenges," at Lehigh.

ISE Professor Aurélie Thiele Weighs in on the Affordable Care Act

ISE Professor, Aurélie Thiele, was interviewed by the personal finance outlet WalletHub on the Affordable Care Act and success metrics for the new regulations. In particular, considering only the change to the size of the uninsured population in each state does not accurately assess the ACA's impact. Professor Thiele explained to WalletHub, "If more people have health insurance but can't schedule an appointment with a primary-care provider within a reasonable amount of time due to provider unavailability, what is the point of having health insurance?"

Upcoming Events

Please be sure to join the ISE Department for these upcoming events!

To read more about these events, please visit
www.lehigh.edu/ise/events.html

Spencer C. Schantz Public Lecture

Thursday, April 16, 2015

Professor Egon Balas

University Professor of Industrial and Applied Mathematics,
The Thomas Lord Professor of Operations Research at
Carnegie Mellon's Tepper School of Business

ISE Annual Banquet/Distinguished Alumni Award Ceremony

Thursday, April 16, 2015

Honoring the recipient of the 2015 Distinguished Alumni Award,
Andy Greenawalt '76G, '04P, Dell Computer Corporation

Reunion Weekend

Celebrating Reunion Years

45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 00, 05, 10

May 14-17, 2015

MOPTA 2015

July 20-22, 2015