BOSTON INFORMS MEETING
and talk by MIT Professor Richard Larson

Model Thinking for Everyday Life

Date: Wednesday, March 20, 2024
Time: Meeting at 6:30 pm with refreshments, Talk: 7 – 8 pm
Title: Discussion of a new book: Model Thinking for Everyday Life
Speaker: Professor Richard Larson, Mitsui Professor, Institute for Data, Systems, and Society, Massachusetts Institute of Technology
Location: Babson College, Olin Hall, Room 102
Address: 4 Babson College Drive, Wellesley, MA 02482

Below are directions and a map, also available at https://www.babson.edu/visit-babson/wellesley-main-campus/

Logistics:

Meeting will be held in person and by WebEx.

Please RSVP if you plan to attend in person or by WebEx by emailing Nate Trotman at ntrotman@babson.edu

- RSVP by email with subject line "Boston INFORMS meeting"
- Please RSVP by email and indicate if you will attend (a) in person or (b) by WebEx, we need an accurate count for in-person attendees to plan for space, food, and drink and for WebEx attendees in order to provide a WebEx invite/link
- Refreshments will be provided for in-person attendees
- Your Cost: $0

Abstract:

This active-learning book, published by INFORMS, is designed to be engaging, interactive, instructive, and fun! The reader will use a sharpened pencil and a Blank Sheet of Paper to move forward on many topics. A key motivation is our perception that much "learning" these days takes place on the computer. People often confuse a Google search with learning. They confuse dropping

data into a “plug and chug” algorithm with learning. With reliance on technology, they have lost track of orders of magnitude, losing ability to guestimate the approximate answer to a problem. Faced with a new problem, people often lack the ability to frame and formulate it using basic principles. So, we move ahead with all computers off, our only technology being a sharpened pencil and a Blank Sheet of Paper.

Model thinking has two equally important and related interpretations: (1) thinking aided by conceptual and/or mathematical models and (2) exemplary thinking—a type of thinking to be emulated. Just like there are “model citizens,” we can have, “model thinkers!” In many problems, both interpretations of model thinking can help to get us to where we want to go—to full problem comprehension. For instance, a model thinker will often utilize mathematical or conceptual models as part of her analysis of a problem. And we would hope that those who primarily use such formal models in their work are also model thinkers more broadly!

Model thinking goes hand in hand with “discovery learning.” By applying methods of model thinking to a previously unanalyzed (by you) process, you yourself discover and then understand the full operation of the process. This is much better than simply seeking “an answer” via a search engine, writing it down and soon forgetting it. Discovery learning tends to be remembered learning. Benjamin Franklin summarized it well: “Tell me and I forget. Teach me and I remember. Involve me and I learn.”

Bio:

Prof. Richard Larson’s career has focused on operations research as applied to services industries. He is author, co-author or editor of six books and author of over 75 scientific articles, primarily in the fields of technology-enabled education, urban service systems (esp. emergency response systems), queueing, logistics and workforce planning. His latest book, published this year by INFORMS, is “Model Thinking for Everyday Life, How to make smarter decisions.” (available on Amazon).

Dr. Larson is inventor of the Hypercube Queueing Model — for deploying urban emergency services — and the Queue Inference Engine, using ’big data’ to determine the performance of technology-enabled queues such as automatic teller machines. Known as “Dr. Queue”, Dr. Larson has appeared extensively in national and international media. He is a Founding Fellow of The Institute for Operations Research and the Management Sciences (INFORMS), past president of the Operations Research Society of America (ORSA), past president of INFORMS, and a member of the U.S. National Academy of Engineering.

Dr. Larson is principal investigator of the MIT BLOSSOMS Initiative, which offers a series of freely available interactive video lessons for classrooms; he is founder and director of MIT LINC (Learning International Networks Consortium), which promotes digital learning technologies to advance quality education worldwide.

DRIVING TO CAMPUS

From the east:

Take the Massachusetts Turnpike to Exit 123A to merge onto I-95 S toward Providence. After the tolls, follow signs to Route 95/128 South to Exit 38 - 37B (Route 16 Newton/Wellesley) …

From the west:

Take the Massachusetts Turnpike to Exit 123A to merge onto I-95 S toward Providence. After the tolls, follow signs to Route 95/128 South to Exit 38 - 37B (Route 16 Newton/Wellesley) …

From the south:

Follow Route 95/128 North to Exit 38 - 37B (Route 16 Newton/Wellesley) …

From the north:

Follow Route 95/128 South to Exit 38 - 37B (Route 16 Newton/Wellesley) …

Then …

At end of the offramp, follow signs for Route 16 West (Washington Street). Continue on Route 16 West for 2 miles through Newton Lower Falls and Wellesley Hills. Turn left onto Forest Street and follow for 1 mile to Babson College; the main entrance is on the right.