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Section Website

http://sites.ieee.org/stlouis

Section meetings are held the third Thursday of each month. The July meeting of the Saint Louis Section of the IEEE will include an informative talk.

From Day-to-Day Operations to Population Health Planning

Dan Livengood

Adjunct Professor Electrical and Systems Engineering Washington University in Saint Louis

Date: Thursday July 20, 2017

Time: Brief section meeting at 6:00 pm with talk at 6:30 pm

Location: McDonnell Douglas Hall (Grass Room)

> Saint Louis University 3450 Lindell Blvd St Louis, MO 63103

Abstract

In this talk, we will explore some applications of systems engineering to healthcare operations ranging from the tactical decisions of day-to-day planning up to the strategical decisions of population health planning. Challenges to making "optimal" decisions when faced with future uncertainty can range from flaws of averages to analysis paralysis. Avoiding these challenges will be presented through a few case studies that will demonstrate how different engineering-based tools and techniques can improve healthcare system performance.

Bio

Dan Livengood is an Adjunct Professor at Washington University in St. Louis, and he also leads the Bonsai Resource Group as the chief systems engineer and technologist. He specializes in system optimization and managing variability under uncertainty, particularly when multiple considerations affect system performance and operational management. Dan holds a Ph.D. from MIT's Engineering Systems Division and has worked in a variety of industries, including renewable energy, health & social services, logistics, and lean product development.