Inventory Management of a Fast-Fashion Retail Network  
(joint work with Felipe Caro, UCLA)

Abstract: Fast-fashion retailers (e.g. Zara, H&M) have met some success responding to volatile demand trends through frequent introductions of new garments produced in small series. An important associated operational problem is the allocation over time of a limited amount of inventory across all stores in their network. I will present stochastic and deterministic models developed in collaboration with a large fast-fashion retailer (Zara) to address this challenge, then discuss the implementation and impact of this work.

Bio: Jérémie Gallien is the J. Spencer Standish (1945) Associate Professor in the Operations Management Group of the MIT Sloan School of Management. His research focuses on mathematical models for the control of physical flows and economic interfaces in supply-chains. In particular, he has worked recently on outbound warehouse optimization for online retailers, dynamic assortment and inventory management for fast-fashion retail store networks, dynamic routing of inbound containers for computer manufacturers, and online auctions. Pr. Gallien holds a Ph.D in Operations Research from MIT and an Eng.D in Operations Management and Applied Mathematics from the Ecole des Mines de Paris.