**RESEARCH SEMINAR**

**October 12th**

**1:25 – 2:15pm**

**Freeman Auditorium**

**Title**: Balancing large deviations in offline learning

**BIO**

Ilya O. Ryzhov is an Associate Professor of Operations Management in the Decision, Operations & Information Technologies department at the Robert H. Smith School of Business, University of Maryland (with a joint appointment in the Institute for Systems Research). His work deals with decision-making in business analytics, with a focus on optimal learning. He is an Associate Editor at Operations Research, and a recipient of the INFORMS Simulation Society's Outstanding Simulation Publication Award.

**ABSTRACT**

We consider offline learning problems where simulation is used to collect noisy information about a finite set of choices, subject to a limited "information budget." The efficiency of information collection procedures in this setting is governed by the large deviations behavior of the simulation output. We present our ongoing work on a new class of algorithms that can adaptively learn the theoretically optimal budget allocation, without any tuning, using simple and efficient computations.