

Efficiency Analysis in Algorithmic Recursions for Optimization: Applications to Healthcare Management

SEMINAR SESSION INFORMATION

DATE: Wednesday, November 9

TIME: 12:15pm

LOCATION: Durham 260

PROVIDED: Pizza and Soda

SPEAKER INFORMATION

Fatemeh S. Hashemi
Postdoctoral Scholar

Grado Department of Industrial
& Systems Engineering

MEMBERSHIP INFORMATION

Fees are as follows and include all weekly seminars (22+) & workshops.

FIRST MEETING: FREE

MEETING: \$5

SEMESTER: \$25

YEAR: \$40

Real-world applications of operations research have mostly been intertwined with optimization problems, where naturally, the goal is to find the most accurate solution/s. In most cases, due to the urgent nature of the problems posted, the solutions also need to be found with the least possible “effort.” Algorithmic recursions have long been discussed in the literature to solve a variety of optimization problems, where, at any candidate solution, the underlying objective function either (1) is known with structural error, or (2) can be estimated with deterministic/stochastic error. In such context, we ask how to tackle different types of errors exist in the problem to solve for the most accurate and fast solutions. We also outline two case studies in healthcare applications, where the objective function is of type (2).