Simulation-Based
Sensitivity Analysis and Optimization

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CONTENTS

— A stochastic model with continuous parameter.
  Seek gradient of the expected cost.
— Derivative estimation: FD, FDC, IPA, LR, WD,...
  Finite vs infinite horizon. Ratio of expectations.
  Convergence rates.
— Optimization via RS, SA, SC,....
  Difficulties and convergence rates.

Not covered: probabilistic algorithms for deterministic combinatorial problems, discrete parameters, large-scale problems with thousands of variables, etc.