Publications & Invited Talks (Michael C. Fu, July 2014)

Articles in Refereed Journals


Books


Books Edited


Book Chapters


Papers in Conference Proceedings (Refereed or Invited)


Other Papers


Working Papers


• M.C. Fu and X. Jin, “Convergence of Simulation-Based Policies for Stochastic Dynamic Programming,” under revision.


• A.A. Assad, M.C. Fu, and J.S. Yoo, “A Lower Bounding Result for the Optimal Policy in an Adaptive Staffing Problem,” under revision.


Invited Lectures/Seminars

• November 30, 1990, Atlanta, Georgia, Georgia Institute of Technology, “Perturbation Analysis of (s,S) Inventory Systems.”

• April 12, 1991, Charlottesville, Virginia, University of Virginia, “Perturbation Analysis of (s,S) Inventory Systems.”

• June 2, 1993, Boston, Massachusetts, Boston University “Derivative Estimation for (s,S) Inventory Systems: Random Lead Times and Continuous Time Demand Arrivals.”

• October 21, 1994, Charlottesville, Virginia, University of Virginia, “A Review of Techniques for Simulation Optimization.”

• October 10, 1995, Tilburg University, Center for Economic Research, the Netherlands, “Perturbation Analysis of Stochastic Discrete Event Dynamic Systems.”

• May 20-31, 1996, Tilburg University, Center for Economic Research, the Netherlands, “Perturbation Analysis of Stochastic Discrete Event Systems” (series of invited lectures on current research).

• June 19-21, 1996, Landelijk Netwerk Mathematische Besliskunde National Workshop, Tilburg Institute, Amsterdam, the Netherlands, “Gradient Estimation in Stochastic Discrete-Event Simulation via Perturbation Analysis” (two invited talks).


• May 18, 1999, Ecole Nationale D’Ingenieur (ENIM), Metz, France, “Markov Decision Processes for Semiconductor Fab-Level Decision Making.”

• July 7, 1999, Guanghua Business School, Peking University, China, “Pricing of American-Style Options via Monte Carlo Simulation.”

• September 21, 1999, University of Illinois at Urbana-Champaign, Department of Mechanical and Industrial Engineering, “Pricing of American-Style Options via Monte Carlo Simulation.”

• October 22, 1999, Harvard University, Division of Applied Sciences, “Pricing of American-Style Options via Monte Carlo Simulation.”

• October 26, 1999, Cornell University, School of Operations Research and Industrial Engineering, “Markov Decision Processes for Integrating Life Cycle Dynamics into Fab-Level Decision Making.”

• October 27, 1999, Cornell University, School of Operations Research and Industrial Engineering, “Pricing American Options: A Comparison of Monte Carlo Simulation Approaches.”

• January 11, 2000, University of Texas (Austin), College of Business Administration, Center for Computational Finance, “Pricing of American-Style Options via Monte Carlo Simulation.”


• June 19, 2000, Seoul National University, Department of Mathematics, “Pricing of American-Style Options via Monte Carlo Simulation.”

• November 14, 2000, University of Maryland, Department of Mathematics, Statistics Seminar, “Pricing of American-Style Options via Monte Carlo Simulation.”

• March 16, 2001, George Mason University, Department of Systems Engineering & Operations Research, “Pricing of American-Style Options via Monte Carlo Simulation.”
• October 18, 2001, Department of Industrial Engineering and Management Sciences, Northwestern University, “Pricing of American-Style Derivatives via Monte Carlo Simulation.”


• May 9, 2002, MIT Operations Research Center Seminar Series, “A Large Deviations Analysis of Quantile Estimation with Application to Value at Risk.”

• March 13, 2003, Georgia Institute of Technology, Department of Industrial & Systems Engineering and Department of Mathematics, “American-Asian Options: Optimal Exercise Policies and Simulation-based Valuation.”

• March 14, 2003, University of Cincinnati, co-sponsored by College of Business, Department of Quantitative Analysis & Operations Management, and Department of Electrical and Computer Engineering and Computer Science, “Pricing American-Style Derivatives via Monte Carlo Simulation.”

• November 14, 2003, Boston University, Center for Information and Systems Engineering, “American-Asian Options: Optimal Exercise Policies and Simulation-based Valuation.”


• May 7, 2004, University of Kansas, School of Business, “Pricing of American-style Derivatives via Monte Carlo Simulation.”

• June 30, 2004, Guanghua School of Management, Peking University, China, “Population-Based Evolutionary Approaches for Solving Markov Decision Processes.”

• July 5, 2004, Center for Intelligent and Networked Systems, Tsinghua University, China, “Population-Based Evolutionary Approaches for Solving Markov Decision Processes.”

• February 28, 2005, University of California, Berkeley, Department of Industrial Engineering and Operations Research, “Stochastic Gradient Estimation.”

• April 22, 2005, Boston University, Department of Manufacturing Engineering, “Model Reference Adaptive Search: A New Approach to Global Optimization.”


• December 16, 2005, Instituto de Empresa, Madrid, Spain, “Monte Carlo Simulation for Derivatives Pricing.”
• April 3, 2006, Cocoyoc, Mexico, NSF Workshop on Approximate Dynamic Programming, “Introduction to Simulation.”
• June 12, 2006, Haholmen by Molde, Norway, Workshop on Stochastics in Logistics and Transportation, “Simulation and Optimization.”
• August 11, 2006, Zhejiang University, Hangzhou, China, College of Information Science and Engineering, “Model-Based Randomized Methods for Global Optimization.”
• April 20, 2007, SUNY Buffalo, Department of Industrial Engineering, “Model Reference Adaptive Search for Global Optimization.”
• June 20, 2007, Tsinghua University, China, Center for Intelligent and Networked Systems, “Model-Based Randomized Methods for Global Optimization.”
• August 6, 2007, Fudan University, Shanghai, China, School of Management, “Model-Based Randomized Methods for Global Optimization.”
• April 23, 2008, University of Minnesota, Department of Mechanical Engineering, “A Model Reference Adaptive Search Method for Global Optimization.”
• July 23, 2009, Zhejiang University, Hangzhou, China, College of Information Science and Engineering, “Stochastic Gradient Estimation: Survey and Recent Research.”
• April 30, 2010, United States Military Academy, West Point, NY, Department of Mathematical Sciences, “Some Topics in Simulation Optimization.”
• June 3, 2010, National Science Foundation, Arlington, VA, Division of Civil, Mechanical, and Manufacturing Innovation, “Selected Research Streams in Simulation Optimization.”
• June 30, 2010, Peking University, China, Guanghua School of Management, “Stochastic Gradient Estimation: Survey and Recent Research;” also July 2, 2010, Tsinghua University, China, Center for Intelligent and Networked Systems.
- July 5, 2011, Macquarie University, Department of Statistics, “Stochastic Derivative Estimation for Discontinuous Payoff Functions with Application to Financial Derivatives.”
- November 29, 2011, Lehigh University, Department of Industrial and Systems Engineering, “Stochastic Gradient Estimation: Tutorial Review and Recent Research.”
- November 16, 2012, Stony Brook University, Department of Applied Mathematics and Statistics, “Augmenting Simulation Metamodels with Direct Gradient Estimates.”
- March 8, 2013, University of Washington, Department of Industrial and Systems Engineering, “Augmenting Simulation Metamodels with Direct Gradient Estimators.”
- March 18, 2013, Politecnico di Milano, Department of Mechanical Engineering, “Stochastic Gradient Estimation: Tutorial Review and Recent Research.”
- April 1, 2013, Arizona State University, School of Computing, Informatics, and Decision Systems Engineering, “Augmenting Simulation Metamodels with Direct Gradient Estimates.”
- June 7, 2013, Zhejiang University, Hangzhou, China, College of Information Science and Engineering, “Augmenting Simulation Metamodels with Direct Gradient Estimates.”
• October 18, 2013, University of Massachusetts, Amherst, INFORMS Speaker Series, “Stochastic Gradient Estimation: Tutorial Review and Recent Research.”