MINUTES of 2008 BUSINESS MEETING

AGENDA

1) Welcome
2) Chairs report (John Birge)
3) Treasurer's report (Marina Epelman)
4) Upcoming conferences
5) Farkas Prize award announcement (Andy Conn, Committee Chair)
6) Optimization Prize for Young Researchers award announcement (John Birge, Committee Chair)
7) Discussion: Publications
8) New business

Chairs report

-- Membership trends: 617 -> 663 -> 628 -> 813 -> 874 -> 845 (estimated)
-- New Constitution passed
-- Conferences:
-- Sessions at INFORMS: 44 (San Francisco), 60 (Pittsburgh), 49+10 (Seattle), 64 (DC)
-- Participation with Conference on Decision and Control
-- Upcoming conferences:
-- CORS-INFORMS International, Toronto, June 14-17, 2009
-- ISMP, Chicago, August 23-28, 2009
-- Planning for INFORMS OPT conference 2010 will begin shortly after the meeting
-- Elections to follow meeting

Treasurer's report

-- 2007: Opening balance $24,088.53; Ending balance $29,516.20.
-- 2008: Opening balance $29,516.20; balance on 6/20/08 $36,298.85 (reflects receipt of most dues payments; most expenses occur in the second half of the year)
-- Updated balance: $35,456.85 on 9/30/08
-- A balance of roughly $500 remains after the 2008 Optimization Society conference at Georgia Tech. The balance will be transferred to the Society's account.

Election results

-- Continuing officers:
-- John Birge, Marina Epelman
-- Chair elect: Nick Sahinidis
-- Vice-chairs: Alper Atamturk (IP), Sam Burer (LP/C), Ted Ralphs (Comp/Soft), Kamal Jain (Networks)
-- Thanks to the vice-chairs finishing their terms:
-- Michael Friedlander (NLP), Ignacio Grossmann (GO), Shabbir Ahmed (SP)
-- Elections to fill the above positions will be held shortly

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Farkas Prize

-- Prize committee: Andy Conn (chair), Tamas Terlaky, Andrzej Ruszczynski, Hanif Sherali
-- 2008 Prize recipient: Dimitris Bertsimas (MIT)
-- Farkas Prize committee statement: "We had an exceptional slate of seventeen candidates and it was very difficult to choose the final winner. We singled out Dimitirs Bertsimas for his outstanding cumulative contributions to optimization and operations research. He has been able, by his breadth of knowledge and dedication, to make many advances that have both a theoretical and practical significance and that have enriched our field considerably. His wide range of research includes: air transportation, where he has developed novel discrete optimization models and presented related polyhedral analyses for air traffic flow management

problems with en route capacities; applied probability and moment problems, where he developed a semidefinite optimization approach to the steady-state analysis of queueing systems, and finance, where he analyzed optimal control problems with execution costs. He is probably most recognized for his work on robust linear optimization, which has allowed researchers to enhance the robustness of their problems without increasing their solution difficulty, and has applied this to many areas, from network flows and inventory control to risk analysis and game theory.

Bertsimas and his coauthors have proposed an approach to address data uncertainty for discrete optimization problems and network flow problems that allows one to control the degree of conservatism of the solution whilst preserving computational efficiency, both theoretically and in practice. In "Tractable approximations to robust conic optimization problems," they propose a relaxed robust counterpart for general conic optimization problems that retain its original structure, i.e., robust LPs remain LPs, robust SOCPs remain SOCPs, and robust SDPs remain SDPs. Furthermore, they presented a general methodology to address the problem of optimally controlling a supply chain subject to uncertain demand in discrete time, where they show that the structure of the optimal robust policy is of the same base-stock character as the optimal stochastic dynamic programming solution for a wide variety of situations. Bertsimas and his coauthors describe a robust optimization method for problems having a nonconvex cost function as well as for problems based on simulations such as those that arise in large PDE solvers, and apply this to an actual engineering problem in electromagnetism that is relevant to nano-photonic design, amongst other problems."

Congratulations to Dimitris!

Optimization Prize for Young Researchers

-- Prize committee: John Birge (chair), Rob Freund, Jon Lee, Steve Vavasis
-- 2008 Prize recipients: Retsef Levi (MIT), Ganesh Janakiraman (NYU), and Mahesh Nagarajan (UBC) for their paper “A 2-Approximation Algorithm for Stochastic Inventory Control Models with Lost Sales,” Mathematics of Operations Research 33(2008), pp. 351–374.
-- Young Researchers Prize citation: "This paper affirmatively answers the 50-year-old question of whether a computationally efficient policy can achieve guaranteed worst-case performance in an inventory system with stochastic demand, replenishment lead times, and lost sales. The issue of lost sales is particularly problematic because the current inventory position does not provide sufficient information as it does in the case of backordered excess demand. To overcome this difficulty, the authors introduce a global amortization of system costs that extends beyond single-period analysis and a new concept of truncated inventory position that captures both on-hand inventory and that which may arrive by a certain date. Their cogent analysis and clear presentation vividly demonstrate how to obtain a policy efficiently and its worst-case bound. The paper also provides extensions to more general frameworks and lays an important foundation for future work in all areas of dynamic stochastic system optimization."

Congratulations to Retsef, Ganesh and Mahesh!

Publications:

-- Announcement: Mathematical Programming Computation has launched; Editor in Chief William Cook; http://www.mathprog.org/sub/journal.htm#MPC

New business

-- No new business arising at the meeting
-- John Birge invited society members to propose issues for future discussion and actions to the officers

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Thanks

Thanks to all of you for supporting the INFORMS Optimization Society.
See you again in San Diego, CA, October 2009 at the 2009 INFORMS meeting.

Marina A. Epelman
Secretary/Treasurer

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