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EDUCATION

PhD in Operation Research, Massachusetts Institute of Technology (M.I.T.), 1997.

MSc in Operations Research, University of Chile, 1988.

Industrial Engineer, University of Chile, 1988.

RESEARCH

Process Optimization, Logistic of Natural Resources, Auction Design and Operations Strategy.

MAIN PUBLICATIONS

Epstein R., Goic M., Weintraub A., Catalán J., Santibañez P., Urrutia R., Cancino R., Gaete S., Aguayo A. "Optimizing Long-Term Production Plans in Underground and Open Pit Copper Mines". Operations Research, 2012.

Olivares M., Weintraub G, Epstein R,, Yung D. "Combinatorial Auctions for Procurement: An Empirical Study of the Chilean School Meals Auction". Management Science, 58(8), pp 1458-1481, 2012.

Epstein R., Weintraub A., Neely A., Valenzuela F., Hurtado S., González G., Naveas M., Infante F., Beiza A, Alarcón F., Catalán J., Berner C., Yung D., Angulo G., González C. "A Strategic Empty Container Logistics Optimization in a Major Shipping Company". Interfaces Vol. 42. Issue 1. 2012.

Duran G., Epstein R., Martinez C., Zamorano G. "Quantitative Methods for a New Configuration of Territorial Units in a Chilean Government Agency Tender Process". Interfaces, Vol. 41 Issue 3, pp. 263-277, 2011.

Catalán J., Epstein R., Guajardo M., Yung D., Martínez C. "Solving Multiple Scenarios in a Combinatorial Auction". Computers & Operations Research, Vol.36 Issue 10, pp.2752-2758, 2009.

Epstein R., Karlsson J., Ronnqvist M., Weintraub A. "Harvest Operational Models in Forestry". Handbook of Operations Research in Natural Resources. pp. 365- 377, 2007.

Epstein R., Ronnqvist M., Weintraub A. "Forest Transportation". Handbook of Operations Research in Natural Resources, pp.391-403, 2007.

Caro R., Epstein R., Santibañez P., Weintraub A. "An Integrated Approach to the Long-Term Planning Process in the Cooper Mining Industry". Handbook of Operations Research in Natural Resources, pp.595-609, 2007.

Weintraub, A., Romero, C., Bjorndal, T., Epstein, R. (Eds) Handbook of Operations Research in Natural Resources. International Series in Operations Research & Management Science, 1st Ed, Springer, New York. 2007.

Epstein R, Weintraub A, Sapunar P, Nieto E, Sessions JB, Sessions J, Bustamante F, Musante H. "A combinatorial heuristic approach for solving real-size machinery location and road design problems in forestry planning". Operations Research, Vol.54 Issue 6, pp.1017-1027, 2006.

Goycoolea M, Murray A, Barahona F, Epstein R, Weintraub A. "Harvest Scheduling Subject to Maximum Area Restrictions: Exploring Exact Approaches". Operations Research, Vol.53 Issue3, pp.490-500, 2005.

Epstein R, Henríquez L, Catalán J, Weintraub GY, Martínez C, Espejo F. "A Combinatorial Auction Improves School Meals in Chile: A Case of OR in Developing Countries". International Transactions in Operational Research, Vol.11, pp.593-612, 2004.

Goycoolea M, Epstein R, Murray A, Weintraub A, Arthaud GJ, Barret TM. "An Adjacency-Modeling Problems Based on Construction Harvesting Areas", Systems Analysis in Forest Resources, pp. 279-283, 2003.

Epstein R, Henriquez L, Catalan J, Weintraub GY, Martinez C. "A combinatorial auction improves school meals in Chile". Interfaces, Vol. 32 Issue 6, pp.1-14, 2002.

Weintraub A, Epstein R. "The Supply Chain in the Forest Industry: Models and Linkages". Applied Optimization, Supply Chain Management Models, Applications, and Research Directions, pp. 343-362, 2002.

Weintraub A, Epstein R, Murphy G, Manley B. "The impact of environmental constraints on short term harvesting: Use of planning tools and mathematical models". Annals of Operations Research, Vol.95, pp.41-66, 2000.

Epstein R, Nieto E, Weintraub A, Chevalier P, Gabarro J. "A system for the design of short term harvesting strategy". European Journal of Operational Research, Vol.119 Issue 2, pp.427-439, 1999.

Epstein R, Morales R, Seron J, Weintraub A. "Use of OR systems in the Chilean forest industries". Interfaces, Vol.29 Issue 1, pp.7-29, 1999.

Weintraub A., Epstein R, Morales R, Seron J, Traverso P. "A truck scheduling system improves efficiency in the forest industries". Interfaces, Vol.26 Issue 4, pp.1-11, 1996.

Weintraub A, Barahona F, Epstein R. "A Column Generation Algorithm for Solving General Forest Planning Problems with Adjacency Constraints". *Forest Science*, Vol.40 Issue 1, pp.142-161, 1994.

Barahona F, Weintraub A, Epstein R. "Habitat Dispersion in Forest Planning and the Stable Set Problem". *Operations Research*, Vol. 40 Supplement 1, pp.S14-S21, 1993.

AWARDS AND DISTINCTIONS

"Franz Edelman Award", First Place, 1998. Awarded annually by INFORMS (Institute for Operations Research and Management Science), this is the most prestigious recognition for the best applied work in the field of Operations Research/Management Science. Winner of other years include companies like IBM, HP, Procter&Gamble and AT&T. We present developments to improve the logistics of the Chilean forest companies. See <https://www.informs.org/Recognize-Excellence/Franz-Edelman-Award/Franz-Edelman-Laureates2/Franz-Edelman-Laureates-Class-of-1998>

"OR for Development", First Place, 2002. Awarded every three years by IFORS (International Federation of Operation Research Societies), this prize recognizes the best applied work in the field of Operations Research/Management Science with social impact in developing countries. We developed an innovative combinatorial mechanism to auction the school meals in public schools. The system, successfully in use from 1997 until today, has assigned more than 5 billion dollar. See <http://ifors.org/web/ifors-prize-for-or-in-development/>

"AVONNI", Chilean Innovation Prize, First Place, 2008. Awarded every year by the Chilean Council for Innovation, this prize is considered the most important recognition for the innovation trajectory in Chile. See <http://www.avonni.cl/portfolio/rafael-epstein-2/>

"Ramón Salas Edwards Award", 2011. Awarded every year by the Engineering Institute of Chile for the best work evaluating its impact and innovation. We present the development and implementation of a system to optimize the worldwide logistics of the more than half a million containers of CSAV, a company among the ten largest shipping companies.

"Franz Edelman Awards", Finalist, 2011. We present our work on the optimizations of the logistics of the half a million containers of a major shipping company, CSAV. The other finalists include the Bank of China, the largest bank of the world, Inter Continental Hotel Group, also the largest hotel chain worldwide, and a huge energy operator of the Mid West of the USA. See <https://www.informs.org/About-INFORMS/News-Room/Press-Releases/2011-Edelman-Finalists>

"Euro Excellence in Practice Award", Finalist, 2010. We optimize the clustering of the Chilean territory to improve auction carried by JUNAEB to provide meals to public schools in the country. See <http://www.euro2010lisbon.org/?content=awards>

"South African Logistic Achiever Awards", First Place, 1996. Awarded every year recognizing the best logistic improvement in South Africa. The company Mondi Forest received this award for the

benefits due to the implementation of our system ASICAM to improve the efficiency of the truck fleet.

“Best Publication in Forestry”, First Place, 2007. Awarded every year by the chapter of INFORMS to the best publication in the forest field. The awarded paper is titled “Harvest Scheduling Subject to Maximum Area Restrictions: Exploring Exact Approaches”, see above.