CURRICULUM VITAE
Endre Boros

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Education

MS. in Mathematics, Eötvös Loránd University, Budapest, Hungary, 1978;
Thesis title: *On Sperner Spaces*; advisor: Ferenc Kárteszi

Doctorate (Ph.D.) in Mathematics, Eötvös Loránd University, Budapest, Hungary, 1985;
Thesis title: *Surrogate Constraints in 0-1 Programming*; advisor: András Prékopa

Employment

Permanent positions

RUTCOR, Rutgers University, New Brunswick, NJ, USA. Professor II and Director 2007 - ;
Professor 1996-2007; Associate Professor 1989-1996.

Department of Operations Research, Computer and Automation Institute, Hungarian Academy of Sciences, Budapest, Hungary. Research Associate 1978-1989.
(On leave, Post-Doctoral Fellow, RUTCOR, Rutgers University. 1986-1989.)

Part-time positions

Lecturer, Eötvös Loránd University, Budapest, Hungary.	1978-1986.
Lecturer, Technical University of Budapest, Hungary.	1976-1978.

Visiting Professor positions

University of Rome La Sapienza, Rome, Italy	June - August, 2013
UPMC, Sorbonne, Paris, France	May – June 2012
University of Rome *La Sapienza,* Rome, Italy	June - July, 2011
University of Rome *La Sapienza*, Rome, Italy,	June - August 2007.
Kyoto University, Kyoto, Japan,	April - June 2003.
University of Rome *La Sapienza*, Rome, Italy	March 2003.
Eötvös Loránd University, Budapest, Hungary	February 2003.
Kyoto University, Kyoto, Japan,	January - March 1999.
University of Cologne, Cologne, Germany,	May 1998.
University of Rome *La Sapienza*, Rome, Italy	May - July 1997.
IMAG, CNRS, Grenoble, France,	September - December 1995.
Tel Aviv University, Tel Aviv, Israel,	June 1995.
Kyoto University, Kyoto, Japan,	March 1995.
Kyoto University, Kyoto, Japan,	September 1994.

Professional Activities

Editorship

Editor-in-Chief of *Discrete Applied Mathematics* (2007-) and of *Annals of Operations Research* (2007-).
Associate Editor of the *Annals of Mathematics and Artificial Intelligence* (1999-).
Member of Editorial Boards of *Computational Management Science* (2003-), *Discrete Optimization* (2003-), *Constraints* (1995-), and *Journal of Combinatorial Optimization* (1995-).

Organization of conferences, tracks, and sessions:

EURO XXVI/INFORMS Joint International Meeting, Rome, Italy, July 1-4, 2013**.** Organized four sessions in a stream on *Boolean and Psuedo-Boolean Optimization.*

EURO XXV, Vilnius, Lithuania, July 8-11, 2012. Organized four sessions in a stream on *Boolean and Psuedo-Boolean Optimization.*

ISAIM 2012, Ft. Lauderdale, FL, January 2012. Organized four sessions in a Special Stream on *Boolean and Pseudo-Boolean Functions* within the 12th International Symposium on Artificial Intelligence and Mathematics.

Workshop on Stochastic Networks (DIMACS/RUTCOR), October 2011. Co-organizer with M. Tortorella, A. Prekopa, and F. Roberts.

CTW 2011, Frascati, Italy, June 14-16, 2011. Organizer (with Marty Golumbic) of the Memorial Sessions dedicated to the memory of Bruno Simeone.

AIRO Winter, La Sapienza – University of Rome, Italy, February 2011. Special session in memory of Bruno Simeone.

EURO XXIV, Lisbon, Portugal, July 2010. Organized stream on *Boolean Programming* with eight sessions.

ISIAM 2010, Ft. Lauderdale, FL, January 2010. Organized four sessions on *Boolean and Pseudo-Boolean Functions* within the 11th International Symposium on Artificial Intelligence and Mathematics.

EURO XXIII, Bonn, July 2009. Organized Stream on *Boolean Programming* with six sessions.

Organizer of DIMACS Workshop on Algorithmic Challenges in Optimization, Game Theory and Computer Science: in Memory of Leo Khachiyan, March 9-10, 2009. Organized workshop and secured funding.

Organizer of DIMACS/RUTCOR Workshop on Boolean and Pseudo-Boolean Functions in Memory of Peter L. Hammer, January, 2009.

Organized a one-day Colloquium Celebrating Peter L. Hammer and RUTCOR, January 2009.

INFORMS Annual Fall Meeting, Washington, D.C., October 2008. Organized session: *Pseudo-Boolean Optimization in Memory of Peter L. Hammer.*

INFORMS Annual Fall Meeting, Seattle, November 2007. Organized two sessions: *In Memory of Peter L. Hammer* and *Discrete Optimization in Memory of Peter L. Hammer*

EURO XXII, Prague, July 2007. Two Invited Sessions: *Everything Looking Boolean I* and *II* (dedicated to the memory of Peter L. Hammer).

Organizer of one-day Peter L. Hammer Memorial Colloquium, April 20, 2007

Cluster Chair of the *AI-track,* INFORMS, Denver, 2004.

Co-Chair of the *Conference on Discrete Optimization*, Rutgers University, 1999.

Local Chair of the 1998-99 DIMACS Special Year on *Large Scale Discrete Optimization.*

Cluster Chair of the *AI-track*, INFORMS, Cincinnati, 1999.

Organizer of the tutorial series *Selected Topics in Large Scale Discrete Optimization*, Rutgers University, 1999.

Co-Chair of the *Mini-Symposium on Boolean and Pseudo-Boolean Functions*, Rutgers University,1998.

Program Co-Chair of the *Fifth International Symposium on Artificial Intelligence and Mathematics*, Fort Lauderdale, Florida, 1998.

Co-organizer of the *Boolean Mini-Workshop*, Jerusalem, Israel, 1995.

Regular organizer of numerous sessions and tracks of sessions at INFORMS and EURO Conferences, member of Program Committees of numerous conferences.

Conference participation and Invited Lectures (recent):

IASI, Rome, Italy, June 20, 2013. Seminar talk: “Quadratization of Pseudo-Boolean Functions”

DIMAP, Warwick, England, June 8, 2013. Seminar talk: “k-Total reward games”

Boolean Seminar Liblice, Czech Republic, April 13-14, 2013. Two talks on “Quadratization of pseudo-Boolean functions”

Charles University, Czech Republic, April 12, 2013. *Peter L. Hammer Memorial Lecture*: “Pseudo-Boolean Optimization.”

University of Primorska, Slovenia, November 19, 2012. Seminar talk: "Quadratization of Pseudo-Boolean Functions.**"**

GERAD, University of Montreal, November 8, 2012. Seminar talk: "Quadratization of Pseudo-Boolean Functions"

Lehigh University, PA, November 7, 2012. Seminar talk: "Quadratization of Pseudo-Boolean Functions."

ECCV 2012 Workshop on Higher-Order Models and Global Constraints in Computer Vision, Florence Italy, October 13, 2012. Keynote address on "Quadratization of higher degree binary optimization problems".

DIMACS, September 24, 2012. Seminar: "Interdiction problems and total-reward games"

MATCH-UP 2012 – the Second International Workshop on Matching Under Preferences, Budapest, July 2012: Invited talk: *On Rank-profiles of Stable Matchings.*

UPMC, Sorbonne, Paris, June 2012. Invited lecture: *Quadratization of Pseudo-Boolean Functions*.

CCICADA Research Retreat, March 2012, University of Illinois at Urbana. Invited talk: Optimal Layered Security For Site Protection (Tsvetan Asamov, Emre Yamangil, Endre Boros, Paul Kantor, Fred Roberts).

ISAIM 2012, Ft. Lauderdale, FL, January 2012. Two talks at the 12th International Symposium on Artificial Intelligence and Mathematics: *On quadratizations of pseudo-Boolean functions* and *Hardness results for approximate pure Horn CNF formulae minimization.*

The First 3-C Risk Forum & 2011 International Conference on Engineering and Risk Management (ERM), Fields Institute, Toronto, October 2011. Keynote address: *How to mitigate the risk of blowing up and the cost of being too cautious.*

London School of Economics, Department of Mathematics, October 2011. Invited talk: *Stochastic games*.

University College of London, Department of Mathematics, October 2011. Invited talk: *Parallel-dualization*.

ICALP 2011, Zurich, Switzerland, July 2011. *Stochastic mean payoff games: Smoothed analysis and approximation schemes* (co-authors: K. Elbassioni, Mahmoud Fouz, V. Gurvich, K. Makino, and Bodo Manthey).

CTW 2011, Frascati, Italy, June 2011**.** *Incompatibility Graphs & Data Mining.*

La Sapienza, University of Rome, June 2011. Seminar: *Every stochastic game with perfect information admits a canonical form.*

IASI- CNR, Rome, June 2011. Seminar: *Quadratization of higher degree pseudo-Boolean functions.*

NSF-Sponsored CMMI Research and Innovation Conference, Atlanta, GA, January 2011 (going as PI).

INFORMS Annual Fall Meeting, Austin, TX, November 2010 (Two talks): *Robust classification by orthogonalization* and *Planning for extreme heat events*

EURO XXIV, Lisbon, Portugal, July 2010. *Essential sets and Horn minimization*

IPCO 2010, Lausanne, Switzerland, June 2010. *A Pumping Algorithm for Ergodic Stochastic Mean Payoff Games with Perfect Information*.

International Workshop on Computer Vision 2010, Salerno, Italy, May 2010. Committee on Discussion Panel*: Linear Inverse Systems with Priors.*

University of Paris, March 2010. *Polynomially computable sharp probability bounds*

Workshop in Graph Theory and Combinatorics in Memory of Uri Peled, University of Illinois at Chicago, February 2010. *Incompatibility Graphs.*

11th International Symposium on Artificial Intelligence and Mathematics, Ft. Lauderdale, January 2010. *Cones of non-negative quadratic pseudo-Boolean functions.*

University of Tokyo, Japan, December 2009. Invited seminar: *On terminal games with 3 terminals*.

International Colloquium on Stochastic Modeling and Optimization dedicated to the 80th birthday of Professor Andras Prekopa, RUTCOR, November 30-December 1, 2009. *Polynomially computable sharp probability bounds.*

INFORMS Annual Fall Meeting, San Diego, October 2009. Invited talk at Data Mining Workshop: *What Can and What Should Not Be Learned from Data.*

INFORMS Annual Fall Meeting, San Diego, October 2009. Invited talk: *Optimal Sensor Sequencing.*

DIMACS/CCICADA Student-organized Seminar Series, October 2009. *Sequential decision making for container inspection*

EURO XXIII, Bonn, July 2009. (Three talks): *Cones of nonnegative quadratic pseudo-Boolean functions and lift-and-project hierarchies. Boolean optimization methods for linear inverse systems with edge-preserving priors. A restricted Boolean consensus method for the transitive closure of a digraph.*

ICALP Conference 2009, July 2009, Rhodes, Greece: Invited Talk: *A Fast and Simple Parallel Algorithm for Monotone Dualization.*

Eotvos Lorand University, Budapest, Hungary, July 2009. Seminar Presentation: *Quadratic Programming and Image Enhancement.*

Venice, Italy, May 2009**.** Conference on Graph Cuts.

IASI, Rome, May 2009. Seminar: *Polynomially computable shart probability bounds.*

ARI Grantees Conference, Washington, April 2009 (talk with Paul Kantor).

Carnegie Mellon University, Pittsburgh, March 2009. Seminar: *Polynomially computable bounds for the probability of a union of events*.

DIMACS/DyDan Seminar, March 2009. *Sensor sequencing and LP.*

University of Tokyo, Japan, December 2008. *Applications of autarkies and persistencies in quadratic unconstrained binary optimization.*

DIMACS/DyDAn Workshop on Mathematical Science Methods to Enhance Nuclear Detection, November 2008. Kantor/Boros group presentation: *Optimal sensor sequencing for container inspection.*

Bonn Workshop on Combinatorial Optimization, November 2008. *Quadratic unconstrained binary optimization and its applications.*

INFORMS Annual Fall Meeting, Washington, D.C., October 2008. Organized session: *Pseudo-Boolean Optimization in Memory of Peter L. Hammer.* Talk: *Applications of autarkies and persistencies in quadratic unconstrained binary optimization.*

Toronto, Ontario, Fields Seminar, October 7-8, 2008. *Quadratic binary optimization and its applications.*

Lausanne, Switzerland, De Werra-Liebling Workshop, June 2008. *What remains open in vertex generation.*

Venice, Italy, Image Workshop, May 27-29, 2008. *Preprocessing and probing for image enhancement.*

GERAD Workshop, Montreal, Canada, May 5-9, 2008. Lecture series on *Partially defined Boolean functions and logical analysis of data* (6 hours).

DNDO PI-Workshop, Washington, April 21-22, 2008. *Sensor sequencing.*

DOD SAT Workshop, Baltimore, MD, March 2008. *Persistencies for MAXSAT problems.*

University of California, IPAM (Institute for Pure and Applied Mathematics), Workshop on Graph Cuts and Related Discrete or Continuous Optimization Problems, Los Angeles, February 2008. *A strongly polynomial preprocessing for quadratic binary optimization.*

The Technion, TECHNION MATHEMATICS NET, Haifa, January 2008. *The polytope of decision trees with an application for container inspection.*

University of Haifa, Expert Workshop on Boolean Functions in Memory of Peter L. Hammer, January 2008. Two talks: *Peter L. Hammer and Pseudo-Boolean Optimization* and *A New Parallel Dualization Algorithm.*

University of Tokyo, Japan, December 2007. Invited talk.

INFORMS Annual Fall Meeting, Seattle, November 2007. Two Invited Sessions: *In Memory of Peter L. Hammer* and *Discrete Optimization in Memory of Peter L. Hammer*. Two talks: *Everything Looks Like Boolean…* and *Preprocess or Not to Preprocess: That is the Question.* (Talk by co-author: *Container Vessel Scheduling: Some Solvable Cases.)*

McMaster University, Hamilton, Ontario, November 2007. Seminar: *Optimizing sensor sequencing.*

Queens College, Brooklyn, NY, October 2007. Seminar: *Criteria of solvability of bimatrix games based on excluding certain 2 x 2 subgames.*

EURO XXII, Prague, July 2007. Two Invited Sessions: *Everything Looking Boolean I* and *II* (dedicated to the memory of Peter L. Hammer). Two talks: *Success of pseudo-Boolean optimization* and *How to approximate an unknown Boolean function.*

Professional Awards or Public Service:

Chair of the "INFORMS Young Researcher Award" Committee, 2012.

BIRS (Banff International Research Station, University of British Columbia, Vancouver) Award to organize a one-week workshop September 18-25, 2011.

Member of the **"**INFORMS Young Researcher Award**"** Committee, 2011.

Member of Program Committees:

1) CMMSE 2011, Almeria, Spain, June 26-29, 2011
2) INFORMS 2011 Northeastern Conference, Amherst, May 6-7, 2011
3) ICORES 2012, Vilamoura, Portugal, February 4-6, 2012

Invited Recommender/Evaluator:

1) Canada Research Chair, 2011
2) INFORMS Fellow Award, 2011

3) MacArthur Foundation
4) DFG (German Research Foundation)

Member of the examining board for Ph.D. defense of Imran Rauf, University of Saarlandes, Saarbrucken, Germany, October 25, 2011.

RIP (Research in Pairs) Award to spend two weeks at *The Mathematical Research Institute* of *Oberwolfach,* Germany, March 2011.

RIP (Research in Pairs) Award to spend two weeks at *The Mathematical Research Institute* of *Oberwolfach,* Germany, March 2010.

Evaluation Panel for Doctoral Program DK C 75-N18 - Discrete Mathematics, submitted by Professor Wolfgang WOESS, Vienna, Austria, November 2009.

Bright Idea Award in Operations Management sponsored by Stillman School of Business at Seton Hall and the NJPRO Foundation (the public policy research affiliate of NJ Business and Industry Association) in September 2009 selected for:
E.Boros, L.Lei, Y.Zhao, H.Zhong: *Scheduling vessels and container-yard operations with conflicting objectives.*

Chair of Doctoral Thesis Committee, La Sapienza – University of Rome**,** May 2009 (for Vincenzo Spinelli, Andrea Raiconi, and Francesco Rinaldi).

University Academic Excellence Fund 2008 - Climate and Health Research Initiative

Other Professional Activities

Regular reviewer and/or panel member for NSF, NSA, MITACS-NCE, the Austrian Science Fund, the Israel Science Fund, etc.

Referee for numerous journals, including *Algorithmica*, *European Journal of Operations Research*, *Journal of the ACM*, *Journal of Graph Theory*, *Linear Algebra and Its Applications*, *Management Science*, *Mathematics of Operations Research*, *Mathematical Programming*, *Operations Research Letters*, and *Theoretical Computer Science*.

Honors

Top Cited Article in Discrete Optimization *(2007-2011)* – DO 5 *(2), 2008, pp. 501-529*

Paul Erdös Visiting Professsor, Eötvös Loránd University, Budapest, Hungary, 2003.

Japan Society for the Promotion of Science Fellowship, Kyoto University, Japan, 1995.

CNRS Visiting Fellow, Grenoble University, France, 1995.

J. Farkas Prize of the J. Bolyai Mathematical Society, Hungary, 1985.

Outstanding Young Researcher Award, Computer and Automation Institute, Hungarian Academy of Sciences, 1981.

Teaching Experience

Courses Taught

01:711:453 Theory of Linear Optimization
01:711:465 Integer Programming
16:711:513 Discrete Optimization
16:711:517 Computational Methods of Operations Research
16:711:553 Theory of Boolean Functions
16:711:611 Pseudo-Boolean Functions

Advisor of Post-Doctoral Fellows

Khaled Elbassioni (2003-2005; suppported by NSF grant on *Identification of Threshold, Regular and Submodular Monotone Systems: Theory and Algorithms*; jointly advised with L. Khachiyan and Vladimir Gurvich)
Eddy Mayoraz (1993-1994; supported by ONR project on *Logical Analysis of Data*; jointly advised with Peter L. Hammer)

Advisor of Ph.D students

Selim Bora (Ph.D. 2012: *Inventory and scheduling problems in supply chain management)*
David Neu (Ph.D. 2012: *Feature Selection with Applications to Text Classification)*
Anupama Reddy (Ph.D. 2009: *Combinatorial Pattern-based Survival Analysis with Applications*

in Biology and Medicine)
Liliya Fedzhora (Ph.D., 2008: *A linear programming model for sequential testing*)
Gabriel Tavares (Ph.D., 2008: *New algorithms for quadratic unconstrained binary optimization (QUBO) with applications in engineering and social sciences)*
Konrad Borys (Ph.D., 2006: *On Generation of cut conjunctions, minimal k-connected spanning subgraphs, minimal connected and spanning subsets and vertices*)
Ying Liu (Ph.D., 2003: *Combinatorial box partitioning, box packing and their applications*)
Pierangela Veneziani (Ph.D., 2002: *Combinatorics of Boole's Problem*)
Lijie Shi (Ph.D., 2001: *Bounds on the Size of Turán Type Families and Data Mining*)
Tonguç Ünlüyürt (Ph.D., 1999: *Boolean Functions and Diagnosis Problems*)
Therese C. Biedl (Ph.D., 1997: *Orthogonal Graph Visualization: The Three-Phase Method With Applications*)
Tamás Badics (Ph.D., 1996: *Approximation of some Nonlinear Binary Optimization Problems*)
Arun Balakrishnan (Ph.D., 1996: *Graph Techniques for Sequential Logic Testing*)
Ondrej Cepek (Ph.D., 1995: Structural Properties and Minimization of Horn Boolean Functions)

Advisor of Masters students

Ali Unlu (MS., 2005)
Murat Akarca (MS., 2004)
Anna Oliecka (MS., 1999)
Goksel Goncu (MS., 1997)

Advisor of REU and other students

Brandon Blakeley (Texas), Amanda Olsen (Georgia) and Robert Rand (Toronto), REU students, DIMACS, Summer 2009
Alex Waldron, REU student, DIMACS, Summer 2006
Kathryn Davidson, REU student, DIMACS, Summer 2005.
Elizabeth Hayden, REU student, DIMACS, Summer 2005.
Daniel P. Macdonald, REU student, DIMACS, Summer 2005.
Craig Bowles, REU student, DIMACS, Summer 2005.
Logan Everett, REU student, DIMACS, Summer 2004.
Daniel Krasner, REU student, DIMACS, Summers of 2002 and 2003.
Ricardo Collado, REU student, DIMACS, Summer 2001.
Jarl Friis, Danish student visitor at RUTCOR and DIMACS, 1999-2000.
Ranjit Gopala, undergraduate, practical training at Prudential Securities, portfolio selection with AMPL, 2 credits, Summer-Fall 1998.
Winnie Yau, REU student, DIMACS, Summer 1998.
Mark Krosky, REU student, DIMACS, Summer 1994.
Joel Sokol, REU student, DIMACS, Summer 1993.

External Grants Awarded (current):

Funding Agency: NSF (PI)
Project Period: 6/1/12 – 5/31/15
Title: RI: Medium: Collaborative Research: Graph Cut Algorithms for Domain-specific Higher Order Priors (with Cornell University)

Funding Agency: NSF (Co-PI)
Project period: 08/15/09-7/31/13
Title: Discrete Moment Problems and Applications

Service to Rutgers:

Member of Executive Board, DIMACS

Director of RUTCOR (January 1, 2007 -)

- Initiated joint projects with
  - SCILS (funded by NSF-DNDO)
  - Cornell University (funded by NSF)
  - ISE/NJDOC (pending, DOJ)
  - Mt. Sinai Hospital (pending, NIH)
- Contracted internship and OR modeling project for OSTEOTECH (NJ)

- Initiated hiring process for two positions
  - negotiated tenure homes (ISE, MSIS)
- Planned new MS track in supply chain management (joint with ISE & RBS)
- Planned joint Ph.D. track with RBS

Research Areas and Selected Results

Discrete Optimization, Integer Programming, Unconstrained Binary Optimization, and their applications in VLSI design, etc.

- Settled the complexity of vertex generation [113,126,144]
- Developed incrementally efficient generation for all minimal feasible integral solutions of a monotone system of linear inequalities, answering a question of Lawler, Lenstra and Rinnooy Kan (1980), [79]
- Developed an FPTAS for a hard class of quadratic unconstrained binary optimization [54]
- Developed a characterization of perfect matrices [46]
- Developed a polynomial time algorithm for a VLSI design problem [30,35]
- Developed a polynomial hierarchy for unconstrained quadratic binary optimization, and developed a polyhedral characterization for the lower levels of this hierarchy [21,29]
- Developed a polynomial time reduction of surrogate duality to knapsack [8]

Theory of Boolean Functions, Satisfiability, Dualization, and Horn functions.

- Developed methods, and characterized cases when incrementally efficient dualization is possible [65,72,77,79,98,106,136]
- Developed a polynomial approximation of Horn-renamability [60]
- Found a characterization of dual-subimplicants [56]
- Introduced an LP-based satisfiability index, and showed that it separates hard and easy cases [34]
- Introduced a tractable class of satisfiability, generalizing properly both quadratic and Horn expressions [22,37]
- Developed an incrementally efficient generation of all prime implicants of Horn DNFs (or implicates of Horn CNFs) [22]
- Developed closed form Boole-Bonferroni type probability inequalities [18]
- A fast and parallel algorithm for monotone dualization [145]

Theory of Partially Defined Boolean Functions, and Machine Learning

- Polynomial time feature generation from categorical attributes [100]
- Efficient feature selection algorithm [88]
- Implementation of logical data analysis techniques, and their extension for numerical data [66,49]
- Characterized structured extensions of partial truth tables [45,51,53,59,69]
- Characterized decomposable extensions of partial truth tables [38]

Enumeration Methods, and their Applications in Data Mining, Reliability Theory, etc.

- Settled the complexity of generating maximal frequent sets [77,87]
- New efficient algorithms for hypergraph transversal generation [89,91,96,105,115]
- Incrementally polynomial generation of ``empty rectangles'', and ``p-efficient'' points, improving on the known exponential methods [86]
- Efficient parallel and serial generation of maximal independent sets of hypergraphs [70,119,120,145]
- New incrementally efficient generation of minimal subnetworks guaranteeing certain type of connectivity (or the removal of which destroys certain type of connectivity) [97,99,112,116,124,137]

Graph Theory, Game Theory and Combinatorics

- Showed a connection between games and graphs [50]
- Proved the existence of Nash equilibrium in certain n-person games [92]
- Corrected and settled a conjecture by P. Duchet [52]
- Solved a conjecture by C. Berge and P. Duchet [41]
- Answered a question of P. Erdös [13]
- Solved a longstanding open problem of B. Segre [10]
- Solved several open problems in discrete geometry [1,2,5,14]

Publications

Books, Chapters and Edited Volumes:

1. Boros, E., Horn Functions, In: *Boolean Functions: Theory, Algorithms, and Applications* (Y. Crama and P.L. Hammer, eds.) Cambridge University Press, 2011.
2. E. Boros, Y. Crama, D. de Werra, P. Hansen, F. Maffray, Editors. *The Mathematics of Peter L. Hammer (1936-2006): Graphs, Optimization, and Boolean Models,* volume 188 of *Annals of Operations Research*, Springer, New York, NY, 2011, 427 pages.
3. D. deWerra, E. Boros, A. Hertz, M. Widmer, J. Carlier, editors. In *Fifth International Conference on Graphs and Optimization 2006,* volume 156 (13) of *Discrete Applied Mathematics,* Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, July 2008. Elsevier Science, pp. 2437-2580.
4. E. Boros and V. Gurvich, editors. *In Memory of Leonid Khachiyan (1952 - 2005),* volume 156 (11) of *Discrete Applied Mathematics,* Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, June 2008. Elsevier Science, pp. 1957-2240.
5. M. Anthony, E. Boros, P.L. Hammer, and A. Kogan, editors. *Discrete Mathematics and Data Mining II*, volume 156 (6) of *Discrete Applied Mathematics*, Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, March 2008. Elsevier Science.
6. M. Anthony, E. Boros, P.L. Hammer, and A. Kogan, editors. *Discrete Mathematics and Data Mining II*, volume 154 (7) of *Discrete Applied Mathematics*, Amsterdam, Lausanne, New York, Oxford,Shannon, Singapore, Tokyo, May 2006. Elsevier Science.
7. Boros, E., Hammer, P. & Ibaraki, T. Logical Analysis of Data. In: *Encyclopedia of Data Warehousing and Mining*, (J. Wang, ed.) Idea Group Reference, (2005), pp. 689-692.
8. M. Anthony, E. Boros, P.L. Hammer, and A. Kogan, editors. *Discrete Mathematics and Data Mining*, volume 144 (1-2) of *Discrete Applied Mathematics*, Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, September 2004. Elsevier Science.
9. E. Boros and P.L. Hammer, editors. *Workshop on Discrete Optimization DO'99 – Contributions to Discrete Optimization*, volume 124 of *Discrete Applied Mathematics*, Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, December 2002. Elsevier Science.
10. E. Boros and P.L. Hammer, editors.*Workshop on Discrete Optimization DO'99: Surveys on the State of the Art*, volume 123 of *Discrete Applied Mathematics*, Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, November 2002. Elsevier Science.
11. E. Boros, John Franco, Eugine Freuder, Martin C. Golumbic, R. Greiner, and E. Mayoraz, editors. *Artificial Intelligence and Mathematics IX.*, volume 26 of *Annals of Mathematics and Artificial Intelligence*. Baltzer Science Publishers, December 1999.
12. J.V. Franco, G. Gallo, H.K. Büning, E. Speckenmeyer, E. Boros, and P.L. Hammer, editors. *The Satisfiability Problem/Boolean Functions*, volume 96-97 of *Discrete Applied Mathematics*, Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, November 1999. Elsevier Science.
13. E. Boros and P.L. Hammer, editors. *Boolean Functions*, volume 10 of Topics in Discrete Mathematics, Amsterdam, Lausanne, New York, Oxford, Shannon, Singapore, Tokyo, December 1999. Elsevier Science.
14. E. Boros, J. Franco, E. Freuder, M.C. Golumbic, R. Greiner, and E. Mayoraz, editors. *Artificial Intelligence and Mathematics VIII.,* volume 24 of Annals of Mathematics and Artificial Intelligence. Baltzer Science Publishers, December 1998.
15. E. Boros and R. Greiner, editors. *Artificial Intelligence and Mathematics*, December 1997. Electronic Proceedings of the Fifth International Symposiums on Artificial Intelligence and Mathematics, Fort Lauderdale, Florida, January 4-6, 1998.
16. E. Boros and M.C. Golumbic, editors. *Artificial Intelligence and Mathematics V.,* volume 17 of Annals of Mathematics and Artificial Intelligence. Baltzer Science Publishers, December 1996.
17. E. Boros, editor. ARIDAM VI and VII, volume 60 of *Discrete Applied Mathematics.* Elsevier Science, June 1995.

Publications in Refereed Journals:

1. E. Boros and Z. Füredi. Su un teorema di Karteszi nella geometria combinatoria. *Archimede*, XXIX(2):71-76, 1977. (in Italian).
2. E. Boros. On the number of subdivisions of the unit square. In A. Hajnal, L. Lovász, and V.T. Sós, editors, *Finite and Infinite Sets*, number **37** in *Colloquia Mathematica Societatis János Bolyai*, pages 893--898, Amsterdam - New York, 1981. North Holland. Sixth Hungarian Combinatorial Colloquium, Eger, Hungary, July 6-11, 1981.
3. E. Boros, F. Inotay, and L.B. Kovács. A two stage approach for large scale sewer systems design with application to the Lake Balaton resort area. In L. Somlyodi, S. Heródek, and J. Fisher, editors, *Eutrophication of Shallow Lakes: Modelling and Management; The Lake Balaton Case Study*, number CP-83-S3 in IIASA Collaborative Proceedings Series, pages 315--333, Laxenburg, Austria, 1983. International Institute for Applied Systems Analysis. Veszprém, Hungary, August 29 - September 3, 1982.
4. M. Bíró and E. Boros. Network flows and non-guillotine cutting patterns. *European Journal of Operations Research*, **16**:215--221, 1984.
5. E. Boros and Z. Füredi. The number of triangles covering the center of an n-set. *Geometriae Dedicata*, **17**:69--77, 1984.
6. E. Boros, F. Inotay, and L.B. Kovács. A two stage mathematical model and an interactive program system for sewer system design. *Alkalmazott Matematikai Lapok*, **10**:87—102, 1984. (in Hungarian).
7. E. Boros. Analysis and short-term forecasting of daily electric load. *Zeitschrift fur Angewandte Mathematik und Mechanik*, **66**:T340--T342, 1986.
8. E. Boros. On the complexity of the surrogate dual of 0-1 programming. *Zeitschrift fur Operations Research, Serie (A),* **30**:145--154, 1986.
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