Andrzej Ruszczyński
Curriculum Vitae

Business Address

Rutgers University, Department of Management Science and Information Systems,
100 Rockefeller Road, Piscataway, NJ 08854, tel: (848) 445-3184, fax: (848) 445-6329
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Education and Degrees

1974 M.Sc. in Electrical Engineering and Computer Science

1977 Ph.D. in Control Engineering; thesis: "Interaction Balance Methods for Control of Large-Scale Systems"

1983 Habilitation (Qualification for Professorship); thesis: "Some Properties and Methods of Solution of Nonlinear Stochastic Programming Problems"

all conferred by the Warsaw University of Technology, Warsaw, Poland

1992 Professor, *state title awarded by the President of the Republic of Poland*

Employment

1997-present Professor and Distinguished Professor (since 2005), Department of Management Science and Information Systems, Rutgers University

2001-02, 2008-2009, 2015-2016 Visiting Professor, Department of Operations Research and Financial Engineering, Princeton University

1996-97 Visiting Professor, Department of Industrial Engineering, University of Wisconsin--Madison

1992-96 Leader of the project "Optimization under Uncertainty", International Institute for Applied Systems Analysis, Laxenburg, Austria

1992 Visiting Scholar, Department of Civil Engineering and Operations Research, Princeton University

1991-92 Professor, Institute of Automatic Control, Warsaw University of Technology

1987-90 Vice Dean of the Department of Electronics and Computer Science, Warsaw University of Technology

1986-87 Vice Director, Institute of Automatic Control, Warsaw University of Technology

1984-86 Visiting Scholar, Institute of Operations Research, University of Zurich, Switzerland

1978-83 Associate Professor, Institute of Automatic Control, Warsaw University of Technology

1976-78 Assistant Professor, Institute of Automatic Control, Warsaw University of Technology

Research Interests

- Optimization and Control of Stochastic Systems
- Nonlinear and Dynamic Optimization
- Risk Modeling and Analysis
- Business Analytics

Major Research Achievements

- Optimization theory for risk measures
- Risk-averse dynamic optimization and control
- Optimization with stochastic dominance constraints
- Primal and dual decomposition methods for stochastic optimization problems
- Methods for stochastic optimization with probabilistic constraints
- Stochastic subgradient methods with direction averaging for optimization and learning

Awards and Honors

2021 Rutgers University Faculty Excellence Award;

2021 Office of Naval Research Award N00014-21-1-2161: "Risk-Averse Learning and Control for Distributed Dynamical Systems with Partial Information," Co-Principal Investigator; Total budget $ 900,055; Rutgers Budget $ 390,023; 2021-2024

2019 National Science Foundation Award DMS-1907522: "Risk-Averse Control of Markov Systems with Model Uncertainty," $ 219,996, Principal Investigator;

2018 George B. Dantzig Prize of the Society on Applied and Industrial Mathematics and the Mathematical Optimization Society;

2017 Fellow of INFORMS;

2015 Air Force Office of Scientific Research Award FA95550-15-1-0251, "Coherent Risk-Adjusted Decisions over Time: a Bilevel Programming Approach," $ 482,042, Co-Principal Investigator;

2014 Rutgers University Board of Governors Award for the Excellence in Research;

2013 National Science Foundation Award DMS-1312016: "Time-Consistent Risk-Averse Control of Markov Systems," $ 240,000, Principal Investigator;

2011 Air Force Office of Scientific Research Award FA9550-11-1-0164: "Coherent Risk-Adjusted Decisions over Time: a Bilevel Programming Approach," $ 483,132, Co-Principal Investigator;

2010 National Science Foundation Award CMMI-0965689: "Successive Risk-Neutral Approximations of Dynamic Risk-Averse Optimization Problems," $ 200,000, Principal Investigator;

2009 Invited plenary talk at the International Symposium of Mathematical Programming (Chicago, USA);

2006 National Science Foundation Award DMS-0603728: "Dynamic Stochastic Optimization with Stochastic Ordering Constraints and Risk Functionals," $ 165,160, Principal Investigator;

2004 National Science Foundation Award DMI-0354678: "Risk-Averse Stochastic Optimization," $ 169,092, Principal Investigator;

2003 National Science Foundation Award DMS-0303545: "Semi-Infinite Probabilistic Optimization," $ 102,667, Principal Investigator;

1998 Invited plenary talk at the International Conference on Stochastic Programming (Vancouver, Canada)

1997 Invited semi-plenary talk at the International Symposium of Mathematical Programming (Lausanne, Switzerland);

1996 Invited plenary talk at the SIAM Conference on Optimization (Victoria, Canada);

1969 1st Prize in the Mathematical Olympiad in Poland;

1968–2019 35 prizes in chess problem tournaments in Czechoslovakia, Denmark, England, Finland, Germany, Hungary, the Netherlands, Poland, Sweden, USA, USSR, and Yugoslavia;

Service to the Community

- Mathematical Optimization Society: Chair of the Young Investigator Award Committee, ICCOPT Berlin (2019)
- INFORMS: Member of the Khachiyan Prize Committee (2017)
- Mathematical Optimization Society: Member of the Student Paper Prize Committee (2016)
- National Science Foundation: panelist (2006–2015)
- INFORMS: Chair of the Young Investigator Prize Committee (2014)
- Chair: Broyden Prize Committee (2010-2011)
- INFORMS: Member of the Farkas Prize Committee (2008)
- Member of the Evaluation Committee, Institute of Mathematical Methods of Economics and Business, University of Zürich, Switzerland, December 2005
- INFORMS: Vice-Chair of the Optimization Committee (2004-2006)
- INFORMS: Member and Chair of the Expository Writing Prize Committee (2003–2005)
- Mathematical Programming Society: Chairman of the Committee of Stochastic Programming (1995 – 2001),
- Associate Editor, *SIAM Journal on Optimization* (1997-present)
- Associate Editor, *Annals of Operations Research* (2008-present)
- Associate Editor, *Mathematics of Operations Research* (2010-present)
- Associate Editor, *Optimization Methods and Software* (1999-2017)
- Editor, special issue of *Optimization Methods and Software* 17 (2002), No. 3, *Stochastic Programming* (with A. Prekopa)
- Editor, special issue of *Mathematical Programming, Series B* 89(2001) No. 2, *Mathematical Programming and Finance* (with H. Konno and J. M. Mulvey)

- Editor, special issue of *Mathematical Programming, Series B* 76(1997) No. 3, *Computational Nonsmooth Optimization* (with L. Qi and R. Womersley)
- Editor, special issue of *European Journal of Operational Research* 101 (1997), No.2, *Stochastic Optimization* (with G. Pflug).
- Cluster Organizer, INFORMS Annual Meeting (San Francisco, 2005).
- Cluster Organizer, Mathematical Programming Symposium (Atlanta, 2000).
- Co-Organizer of seven Rutgers–Stevens Workshops on Optimization of Stochastic Systems (2002–2016)
- Co-organizer of the EURO Winter School of Stochastic Optimization (Semmering, Austria, 1996)
- Organizer of the Workshop on Large-Scale Nonsmooth Optimization (Laxenburg, Austria, 1995)
- Organizer of the Workshop on Decomposition and Parallel Computation Methods (Laxenburg, Austria, 1994)
- Organizer of the Workshop on Approximation of Stochastic Programming Problems (Laxenburg, Austria, 1993)
- Session organizer at many SIAM and Mathematical Programming conferences.

Service to the University

- Member, Appointments and Promotions Committee, Rutgers Business School; 2007–2013
- Member and Chair, Research Resources Committee, Rutgers Business School; 2000–2007
- Member, Strategic Planning Committee, Rutgers Business School; 2002-2004
- Member, New Brunswick Computing Advisory Committee; 1998–2001
- Member, Course of Study Committee, Rutgers Business School; 1998-2000
- Member, Hiring Committee, Department of Management Science and Information Systems; 2000–2013

Publications

Books

B7. A. Shapiro, D. Dentcheva and A. Ruszczyński, *Lectures on Stochastic Programming*, SIAM Publications, Philadelphia 2009 (second edition 2013, third edition 2021).

B6. A. Ruszczyński, *Nonlinear Optimization*, Princeton University Press, Princeton 2006.

B5. A. Ruszczyński and A. Shapiro (Eds.), *Stochastic Programming*, *Handbooks in Operations Research and Management Science*, Elsevier, Amsterdam 2003.

B4. C. Greengard and A. Ruszczyński (Eds.), *Decision Making Under Uncertainty. Energy and Power*, Springer Verlag, New York 2002.

B3. M. Brdyś and A. Ruszczyński, *Optimization Methods in Problems*, Wydawnictwa Naukowo-Techniczne, Warsaw, 1984 (in Polish).

B2. T. Kreglewski, T. Rogowski, A. Ruszczyński and J. Szymanowski, *Optimization Methods in FORTRAN*, Państwowe Wydawnictwa Naukowe, Warsaw, 1984 (in Polish).

B1. A.Ruszczyński, *Theory and Numerical Methods of Nonlinear Stochastic Programming*, Wydawnictwa Politechniki Warszawskiej, Warsaw, 1982 (in Polish).

Chapters in Books

C12 A. Ruszczyński, Advances in Risk-Averse Optimization, *Tutorials in Operations Research*, INFORMS 2013, pp. 168–190.

C11. D. Dentcheva and A. Ruszczyński, Portfolio Optimization with Risk Control by Stochastic Dominance Constraints, Chapter 9 of *Stochastic Programming. The State of the Art.*, G. Infanger (ed.), Springer, New York, 2011.

C10. D. Dentcheva and A. Ruszczyński, Risk-Averse Portfolio Optimization via Stochastic Dominance Constraints, Chapter 15 of *Handbook of Quantitative Finance*, C. F. Lee (ed.), Springer, New York, 2010.

C9. A. Ruszczyński and A. Shapiro, Optimization of risk measures, in G. Calafiore and F. Dabbene (Eds.) *Probabilistic and Randomized Methods for Design under Uncertainty*, Springer-Verlag, London, 2005, pp. 117–158.

C8. G. Ch. Pflug and A. Ruszczyński, A Risk Measure for Income Processes, in: G. Szegö (Ed.), *Risk Measures for the 21st Century*, Wiley, Chichester, 2004, ISBN: 0-470-86154-1, pages 249–270.

C7. A. Ruszczyński and A. Shapiro, Stochastic Programming Models, in: A. Ruszczyński and A. Shapiro (Eds.),*Stochastic Programming*, Elsevier, Amsterdam 2003, ISBN: 0-444-50854-6, pages 1–64.

C6. A. Ruszczyński and A. Shapiro, Optimality and Duality in Stochastic Programming, in: A. Ruszczyński and A. Shapiro (Eds.), *Stochastic Programming*, Elsevier, Amsterdam 2003, ISBN: 0-444-50854-6, pages 65–140.

C5. A. Ruszczyński, Decomposition Methods, in: A. Ruszczyński and A. Shapiro (Eds.), *Stochastic Programming*, Elsevier, Amsterdam 2003, ISBN: 0-444-50854-6, pages 141–212.

C4. B.J. Lence and A. Ruszczyński, Managing Water Quality under Uncertainty, in: J.J. Bogardi and Z.B. Kundzewicz (Eds.), *Risk, Reliability, Uncertainty and Robustness of Water Resources Systems*, Cambridge University Press, Cambridge, U.K., 2001, ISBN: 0-521-80036-6, pages 143–152.

C3. W.B. Arthur and A. Ruszczyński, Strategic pricing in markets with increasing returns, in: W.B. Arthur (Ed.),*Increasing Returns and Path-Dependence in the Economy*, The University of Michigan Press, Ann Arbor, 1994, pages 159–184.

C2. P. Kall, A. Ruszczyński and K. Frauendorfer, Approximation techniques in stochastic programming, in: Yu. Ermoliev and R. Wets (Eds.), *Numerical Methods for Stochastic Optimization*, Springer-Verlag, 1987, pages 33–64.

C1. A. Ruszczyński and J. Szymanowski, Mathematical Programming, in: *Mathematical Handbook*, Wydawnictwa Naukowo-Techniczne, Warsaw 1986, pages 248–317 (in Polish).

Articles in Refereed Journals

A105. A. Ruszczyński, A stochastic subgradient method for nonsmooth nonconvex multilevel composition optimization, *SIAM Journal on Control and Optimization* 59 (33) (2021), 2301–2320.

A104. D. Dentcheva, A. Ruszczyński, Subregular recourse in nonlinear multistage stochastic optimization, *Mathematical Programming, Series B*, 2021, Online First, pp. 1–22.

A103. Y. Du, X. Lin, M. Pham, A. Ruszczyński, An outer-inner linearization method for nonconvex and nondifferentiable composite regularization problems, *Journal of Global Optimization* 81 (1) (2021), 179–202.

A102. Y. Du, X. Lin, M. Pham, A. Ruszczyński, Selective linearization for multi-block statistical learning, *European Journal of Operational Research* 293 (1) (2021), 219-228.

A101. Ü. Köse, A. Ruszczyński, Risk-averse learning by temporal difference methods with Markov risk measures, *Journal of Machine Learning Research* 22(2021), 1–34.

A100. A. Ruszczyński, J. Yao, A dual method for the evaluation of risk in diffusion processes, *ESAIM: Control, Optimization, and Calculus of Variations* 26(2020), 96–116.

A99. A. Ruszczyński, Convergence of a stochastic subgradient method with averaging for nonsmooth nonconvex constrained optimization. *Optimization Letters* 14(2020), pp. 1615-1625.

A98. S. Ghadimi, A. Ruszczyński, and M. Wang, A single time-scale stochastic approximation method for nested stochastic optimization. *SIAM Journal on Optimization* 30 (1) (2020), pp. 960-979.

A97. D. Dentcheva, A. Ruszczyński, Risk forms: representation, disintegration, and application to partially observable two-stage systems, *Mathematical Programming, Series B*, 181(2)(2020), pp. 297–317.

A96. J. Fan, A. Ruszczyński, Process-based risk measures and risk-averse control of discrete-time systems, *Mathematical Programming*, (2018), pp. 1–28.

A95. J. Fan, A. Ruszczyński, Risk measurement and risk-averse control of partially observable discrete-time Markov systems, *Mathematical Methods of Operations Research*, 88(2)(2018), pp. 161–184.

A94. D. Dentcheva, A. Ruszczyński, Time-coherent risk measures for continuous-time Markov chains, *SIAM Journal on Financial Mathematics*, 9(2) (2018), pp. 690–715.

A93. Y. Du, X. Lin, A. Ruszczyński, A selective linearization method for multi-block convex optimization, *SIAM Journal on Optimization*, 27 (2017), pp. 1102–1117.

A92. Y. Du, A. Ruszczyński, Rate of convergence of the bundle method, *Journal of Optimization Theory and Applications*, 173 (2017), pp. 908–922.

A91. D. Dentcheva, S. Penev, A. Ruszczyński, Statistical estimation of composite risk functionals and risk optimization problems, *Annals of the Institute of Statistical Mathematics*, 69 (4) (2017), pp, 737–760.

A90. S. Gülten, A. Ruszczyński, Two-stage portfolio optimization with higher-order conditional measures of risk, *Annals of Operations Research*, 229 (1), 2015, pp. 409–427.

A89. T. Asamov, A. Ruszczyński, Time-consistent approximations of risk-averse multistage stochastic optimization problems, *Mathematical Programming*, 153 (2), 2015, pp. 459–493.

A88. Ö. Çavuş, A. Ruszczyński, Risk-averse control of undiscounted transient Markov models, *SIAM Journal on Control and Optimization*, 52(6), 2014, pp. 3935–3966.

A87. X. Lin, M. Pham, A. Ruszczyński, Alternating linearization for structured regularization problems, *Journal of Machine Learning Research*, 15 (2014), pp. 3447-3481.

A86. D. Dentcheva, A. Ruszczyński, Risk preferences on the space of quantile functions, *Mathematical Programming, Series B*, 148 (1-2), 2014, pp. 181–200.

A85. Ö. Çavuş, A. Ruszczyński, Computational methods for risk-averse undiscounted transient Markov models, *Operations Research*, 62 (2), 2014, pp. 401–417.

A84. D. Dentcheva, A. Ruszczyński, Common mathematical foundations of expected utility and dual utility theories, *SIAM Journal on Optimization* 23 (2013), No. 1, 381–405.

A83. R. Collado, D. Papp, A. Ruszczyński, Scenario decomposition of risk-averse multistage stochastic programming problems, *Annals of Operations Research* 200 (2012), No. 1, 147–170.

A82. A. Lizyayev, A. Ruszczyński, Tractable almost stochastic dominance, *European Journal of Operational Research* 218 (2012), No. 2, 448-455.

A81. S. Choi, A. Ruszczyński, Y. Zhao, A multi-product risk-averse newsvendor with law invariant coherent measures of risk, *Operations Research* 59 (2011), No. 2, 346–364.

A80. S. Choi, A. Ruszczynski, A Multi-product risk-averse newsvendor with exponential utility function, *European Journal of Operational Research* 214 (2011), No. 1, 78–84.

A79. N. Miller, A. Ruszczyński, Risk-averse two-stage stochastic linear programming: modeling and decomposition, *Operations Research*, 59 (2011) 125-132.

A78. D. Dentcheva, S. Penev, A. Ruszczyński, Kusuoka representation of higher order dual risk measures, *Annals of Operations Research* 181 (2010) 325–335.

A77. A. Ruszczyński, Risk-averse dynamic programming for Markov decision processes, *Mathematical Programming*, Series B 125 (2010) 235–261.

A76. D. Dentcheva, A. Ruszczyński, Inverse cutting plane methods for optimization problems with second-order stochastic dominance constraints, *Optimization* 59 (2010) 323–338.

A75. D. Dentcheva and A. Ruszczyński, Robust stochastic dominance and its application to risk-averse optimization, *Mathematical Programming*, Series B 123 (2010) 85–100.

A74. D. Dentcheva and A. Ruszczyński, Duality between coherent risk measures and stochastic dominance constraints in risk-averse optimization, *Pacific J. of Optimization* 4 (2008), No. 3, 433–446.

A73. G. Rudolf and A. Ruszczyński, Optimization problems with second order stochastic dominance constraints: duality, compact formulations, and cut generation methods, *SIAM Journal on Optimization* 19 (2008), No. 3, 1326–1343.

A72. S.D. Flåm and A. Ruszczyński, Finding normalized equilibrium in convex-concave games, *Int. Game Theory Rev.* 10 (2008), no. 1, 37–51.

A71. D. Dentcheva and A. Ruszczyński, Stochastic dynamic optimization with discounted stochastic dominance constraints, *SIAM Journal on Control and Optimization* 47 (2008), No. 5, 2540–2556.

A70. D. Dentcheva and A. Ruszczyński, Stochastic dominance for sequences and implied utility in dynamic optimization, *Comptes Rendus de l'Academie Bulgare des Sciences* 57 (2008), No. 1, 15–22.

A69. N. Miller and A. Ruszczyński, Risk-adjusted probability measures in portfolio optimization with coherent measures of risk, *European Journal of Operational Research* 191 (2008) 193–206.

A69. A. Ruszczyński, A merit function approach to the subgradient method with averaging, *Optimization Methods and Software* 23 (2008), No. 1, 161–172.

A68. D. Dentcheva, A. Ruszczyński, Optimization with multivariate stochastic dominance constraints, *Mathematical Programming* 117 (2009) 111–127.

A67. N. Noyan, A. Ruszczyński, Valid inequalities and restrictions for stochastic programming problems with first order stochastic dominance constraints, *Mathematical Programming* 114 (2008) 249–275.

A66. S. Choi and A. Ruszczyński, A risk-averse newsvendor with law invariant coherent measures of risk. *Operations Research Letters* 36 (2008), No. 1, 77–82.

A65. D. Dentcheva, R. Henrion and A. Ruszczyński, Stability and sensitivity of optimization problems with first order stochastic dominance constraints, *SIAM Journal on Optimization* 18 (2007) 322–333.

A64. M. Lejeune, A. Ruszczyński, An efficient trajectory method for probabilistic production-inventory-distribution problems, *Operations Research* 55 (2007) 378–394.

A63. A. Ruszczyński and A. Shapiro, Conditional risk mappings, *Mathematics of Operations Research* 31 (2006) 544–561.

A62. A. Ruszczyński and A. Shapiro, Optimization of convex risk functions, *Mathematics of Operations Research* 31 (2006) 433–452.

A61. L. Lei, S.G. Liu, A. Ruszczyński and S. Park, On the integrated production, inventory, and distribution routing problem, *IIE Transactions* 38 (2006) 955–970.

A60. N. Noyan, G. Rudolf and A. Ruszczyński, Relaxations of linear programming problems with first order stochastic dominance constraints, *Operations Research Letters* 34 (2006) 653–659.

A59. D. Dentcheva and A. Ruszczyński, Inverse stochastic dominance constraints and rank dependent expected utility theory, *Mathematical Programming* 108 (2006) 297–311.

A58. D. Dentcheva and A. Ruszczyński, Portfolio optimization with stochastic dominance constraints. *Journal of Banking and Finance* 30/2 (2006) 433–451.

A57. P. Beraldi and A. Ruszczyński, Beam search heuristic to solve stochastic integer problems under probabilistic constraints, *European Journal of Operational Research* 167 (2005) 35–47.

A56. D. Dentcheva, A Ruszczyński, Inverse stochastic dominance constraints and quantile utility theory, *Comptes Rendus de l'Academie Bulgare des Sciences* 58 (2005), No.2, 11–16.

A55. D. Dentcheva and A. Ruszczyński, Semi-infinite probabilistic optimization: first order stochastic dominance constraints, *Optimization* 53 (2004) 583–601

A54. W. Powell, A. Ruszczyński, H. Topaloglu, Learning algorithms for separable approximations of stochastic optimization problems, *Mathematics of Operations Research* 29 (2004) 814–836.

A53. D. Dentcheva, B. Lai, and A. Ruszczyński, Dual methods for probabilistic optimization, *Mathematical Methods of Operations Research* 60 (2004) 331–346.

A52. D. Dentcheva and A. Ruszczyński, Optimality and duality theory for stochastic optimization problems with nonlinear dominance constraints, *Mathematical Programming* 99 (2004) 329–350.

A51. D. Dentcheva and A. Ruszczyński, Convexification of stochastic ordering, *Comptes Rendus de l'Academie Bulgare des Sciences* 57 (2004), No. 4, 11–16.

A50. D. Dentcheva and A. Ruszczyński, Optimization with stochastic dominance constraints, *SIAM Journal on Optimization* 14 (2003) 548–566.

A49. A. Ruszczyński and R.J. Vanderbei, Frontiers of stochastically nondominated portfolios, *Econometrica* 71 (2003) 1287–1297.

A48. D. Dentcheva and A. Ruszczyński, Optimization under nonlinear stochastic dominance, *Comptes Rendus de l'Academie Bulgare des Sciences* 56 (2003), No. 7, pp. 19–25.

A47. D. Dentcheva and A. Ruszczyński, Optimization under linear stochastic dominance, *Comptes Rendus de l'Academie Bulgare des Sciences* 56 (2003), No. 6, pp. 6–11.

A46. A. Ruszczyński, Probabilistic programming with discrete distributions and precedence constrained knapsack polyhedra, *Mathematical Programming* 93 (2002) 195–215.

A45. W. Ogryczak and A. Ruszczyński, Dual stochastic dominance and related mean–risk models, *SIAM Journal on Optimization* 13 (2002) 60–78.

A44. P. Beraldi and A. Ruszczyński, A branch and bound method for stochastic integer problems under probabilistic constraints, *Optimization Methods and Software* 17 (2002) 359 - 382.

A43. W. Ogryczak and A. Ruszczyński, Dual stochastic dominance and quantile risk measures, *International Transactions in Operations Research* 9 (2002) 1–20.

A42. P. Beraldi and A. Ruszczyński, The probabilistic set covering problem, *Operations Research* 50 (2002) 956–967

A41. D. Dentcheva, A. Prékopa and A. Ruszczyński, Bounds for stochastic integer programming with probabilistic constraints, *Discrete Applied Mathematics* 124 (2002) 55–65.

A40. A. Kryazhimskii and A. Ruszczyński, Constraint aggregation in infinite-dimensional spaces and applications, *Mathematics of Operations Research* 26 (2001) 769–795.

A39. D. Dentcheva, A. Prékopa and A. Ruszczyński, On convex probabilistic programming with discrete distributions, *Nonlinear Analysis* 47 (2001) 1997–2009

A38. W. Ogryczak and A. Ruszczyński, On consistency of stochastic dominance and mean–semideviation models, *Mathematical Programming* 89 (2001), 217-232

A37. D. Dentcheva, A. Prékopa and A. Ruszczyński, Concavity and efficient points of discrete distributions in probabilistic programming, *Mathematical Programming* 89 (2000) 55–77.

A36. A.Ruszczyński, Dynamics aggregation in stochastic control problems, *Journal of Optimization Theory and Applications* 105(3) (2000) 639–658.

A35. M.C. Ferris and A. Ruszczyński, Robust path choice and vehicle guidance in networks with failures, *Networks* 35 (2000) 181–194.

A34. A.Ruszczyński, Some advances in decomposition methods for stochastic linear programming, *Annals of Operations Research* 85 (1999) 153–172

A33. W. Ogryczak and A. Ruszczyński, From stochastic dominance to mean–risk models: Semideviations as risk measures, *European Journal of Operational Research* 116 (1999) 33–50 [published on-line as an Interim Report 97-027 of the International Institute of Applied Systems Analysis, Laxenburg, 1997]

A32. K.C. Kiwiel, C.H. Rosa and A. Ruszczyński, Proximal decomposition via alternating linearization, *SIAM Journal on Optimization* 9 (1999) 668–689.

A31. V.I Norkin, G.Ch. Pflug and A. Ruszczyński, A stochastic branch and bound method for stochastic global optimization, *Mathematical Programming* 83 (1998) 425–450.

A30. V.I. Norkin, Yu.M. Ermoliev and A. Ruszczyński, On optimal allocation of indivisibles under uncertainty, *Operations Research* 46 (1998) 381–395.

A29. G. Pflug, A. Ruszczyński and R. Schultz, On the Glivenko–Cantelli problem in stochastic programming: mixed-integer linear recourse, *Mathematical Methods of Operations Research (ZOR)* 47 (1998) 39–49.

A28. G. Pflug, A. Ruszczyński and R. Schultz, On the Glivenko–Cantelli problem in stochastic programming: linear nd convex recourse, *Mathematics of Operations Research* 23 (1997) 204–220.

A27. A. Ruszczyński, A. Świętanowski, Accelerating the regularized decomposition method for two stage stochastic linear problems, *European Journal of Operational Research* 101 (1997) 328–342.

A26. A. Ruszczyński, Decomposition methods in stochastic programming, *Mathematical Programming* 79 (1997) 333–353.

A25. Yu. Ermoliev, A. Kryazhimskii and A. Ruszczyński, A constraint aggregation principle in convex optimization, *Mathematical Programming* 76 (1997) 353–372.

A24. Yu. Ermoliev and A. Ruszczyński, Convex optimization by radial search, *Journal of Optimization Theory and Applications* 91 (1996) 731–738.

A23. C. Rosa and A. Ruszczyński, On augmented Lagrangian decomposition methods for multistage stochastic programs, *Annals of Operations Research* 64 (1996) 289–309.

A22. A. Altman, M. Amann, G. Klaassen, A. Ruszczyński, W. Schöpp, Cost-effective sulphur emission under uncertainty, *European Journal of Operational Research* 90 (1996) 395–412.

A21. W. Gutjahr, G. Pflug and A. Ruszczyński, Configurations of series–parallel networks with maximum reliability, *Microelectron. Reliab.* 36 (1996) 247–253.

A20. A. Ruszczyński, On convergence of an augmented Lagrangian decomposition method for sparse convex optimization, *Mathematics of Operations Research* 20 (1995) 634–656.

A19. J.M. Mulvey and A. Ruszczyński, A new scenario decomposition method for large-scale stochastic optimization, *Operations Research* 43 (1995) 477–490.

A18. A.J. Berger, J.M. Mulvey and A. Ruszczyński, An extension of the DQA algorithm to convex stochastic programs, *SIAM Journal on Optimization* 4 (1994) 735–753.

A17. A. Ruszczyński, Parallel decomposition of multistage stochastic programming problems, *Mathematical Programming* 58(1993) 201–228.

A16. J. Gondzio and A. Ruszczyński, Sensitivity method for basis inverse representation in multistage stochastic programming problems, *Journal of Optimization Theory and Applications* 74 (1992) 221–242.

A15. J.M. Mulvey and A. Ruszczyński, A diagonal quadratic approximation method for large scale linear programs, *Operations Research Letters* 12(1992) 205–215.

A14. B. Arthur and A. Ruszczyński, Strategic pricing in markets with a conformity effect, *Archives of Control Sciences* 1(XXXVII) (1992) 7–31.

A13. A. Ruszczyński, An augmented Lagrangian decomposition method for block diagonal linear programming problems, *Operations Research Letters* 8 (1989) 287–294.

A12. A. Ruszczyński, A linearization method for nonsmooth stochastic optimization problems, *Mathematics of Operations Research*, 12 (1987) 32–49.

A11. A. Ruszczyński, A regularized decomposition method for minimizing a sum of polyhedral functions, *Mathematical Programming* 35 (1986) 309–333.

A10. A. Ruszczyński and W. Syski, On convergence of the stochastic subgradient method with on-line stepsize rules, *Journal of Mathematical Analysis and Applications* 114 (1986) 512–527.

A9. A. Ruszczyński and W. Syski, A method of aggregate stochastic subgradients with on-line stepsize rules for convex stochastic programming problems, *Mathematical Programming Study* 28 (1986) 113–131.

A8. A. Ruszczyński and M. Styblinski, Stochastic approximation approach to statistical circuit design, *Electronics Letters* 19 (1983) 300–302.

A7. A. Ruszczyński and W. Syski, Stochastic approximation algorithm with gradient averaging for unconstrained problems, *IEEE Transactions on Automatic Control* AC–28 (1983) 1097–1105.

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- Coordinator of the doctoral program "Operations Research" at Rutgers Business School
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- Co-Author of the undergraduate program "Business Analytics and Information Technology" at Rutgers Business School
- Courses taught at Rutgers University:

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  Stochastic Programming (graduate)
  Optimization Models in Finance (graduate)
  Stochastic Calculus for Finance (graduate)
  Operations Management
  Statistical Methods in Business
  Risk Modeling

- Courses taught at Princeton University:

  Nonlinear Programming (graduate)
  Risk-Averse Optimization (graduate)

- Courses taught at the University of Wisconsin–Madison:

  Stochastic Modeling (undergraduate)
  Stochastic Modeling Techniques (graduate)
  Dynamic Programming (graduate)
  Systems Modeling (graduate)

- Courses taught at Warsaw University of Technology:

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