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Dr.

The H. Milton Stewart School of Industrial and Systems Engineering
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January 2026

I. Earned Degrees

1. 1970 - Master Degree in Mathematics, Moscow State University, USSR
2. 1974 - Ph. D. degree in Mathematics (Soviet Degree of Candidate of Physical & Mathematical Sciences), Moscow State University, USSR
3. 1990 - Doctor of Sciences degree in Mathematics (Soviet Degree of Doctor of Physical & Mathematical Sciences), Supreme Attestation Board at the USSR Council of Ministers

II. Employment:

1. School of Industrial and Systems Engineering, Georgia Institute of Technology, Atlanta, Georgia, USA
August 2005 – : John Hunter Chair and Professor
2. Faculty of Industrial Engineering & Management at Technion, Haifa, Israel
October 1993 – February 2006: chaired full professor (tenured since January 1996, chaired since 1999)
3. Central Economic and Mathematical Institute of the USSR (since 1991 - Russian) Academy of Sciences, Moscow
October 1987 - September 1993: Research Associate (Senior till 1990, Leading 1990-91, Principal since 1991)
4. Research Institute for Automatic Equipment, Moscow October 1973 - October 1987: Research Associate (Senior since 1975)

III. Honors and Awards

III.A. International Awards

1. 1982 - Fulkerson Prize of the Mathematical Programming Society and AMS (with L. Khachiyan and D. Yudin) [for inventing the Ellipsoid method and thus contributing to the proof of polynomial time solvability of Linear Programming]
<http://www.mathopt.org/?nav=fulkerson#winners>
2. 1991 - Dantzig Prize of the Mathematical Programming Society and SIAM (with M. Gr otscel) [for contributions to Mathematical Programming, including investigating limits of performance of convex optimization methods and developing novel efficient algorithms]
<http://www.mathopt.org/?nav=dantzig#winners>
3. 2003 - John von Neumann Theory Prize of INFORMS (with M. Todd) [for contributions to Mathematical Programming, including those to the general theory of polynomial time interior point methods and to discovery and development of Robust Optimization]
<https://www.informs.org/Recognizing-Excellence/Award-Recipients/Arkadi-Nemirovski>
4. 2019 - Norbert Wiener Prize in Applied Mathematics from AMS and SIAM (joint with M. Berger) http://www.ams.org/news?news_id=4727
5. 2023 - World Laureates Association Prize in Computer Science or Mathematics (joint with Yu. Nesterov) <https://www.thewlaprize.org/PressRoom/News/2023/11/06/190.html>
6. 2024 - INFORMS Frederick W. Lanchester prize for monograph IV.A1.7 (joint with A. Juditsky)
<https://www.informs.org/Recognizing-Excellence/INFORMS-Prizes/Frederick-W.-Lanchester-Prize>

III.B. Other Honors

1. 2020 - elected to the National Academy of Sciences
<https://www.nasonline.org/directory-entry/arkadi-s-nemirovski-evwr9a/>
2. 2018 - Le Cam Lecture, 50^e Journées de Statistique de la SFdS (JdS 2018), May 28, Paris-Saclay, France
<http://jds2018.sfds.asso.fr/assets/img/Affiche.pdf>
3. 2018 - *2017 Charles Broyden Prize*, joint with V. Guigues and A. Juditsky (yearly Best Paper Award of *Optimization Methods and Software Editorial Board and Taylor & Francis*) for paper 143
<https://www.tandfonline.com/journals/goms20/collections/best-paper-charles-broyden-prize>
4. 2018 - elected to the American Academy of Arts and Sciences
<https://www.amacad.org/person/arkadi-s-nemirovski>
5. 2017 - elected to the National Academy of Engineering
<https://www.nae.edu/165652/Professor-Arkadi-S-Nemirovski>
6. 2009, 2014, 2021 "Thanks for Being a Great Teacher" notes from the GaTech Center for the Enhancement of Teaching and Learning (for ISyE 6663 course "Nonlinear Programming")
7. 2009 - Honoris Causa Degree of Doctor of Mathematics, University of Waterloo, Canada
8. Oct. 2007 – : Adjunct Professor of Mathematics, School of Mathematics, Georgia Institute of Technology.
9. Oct. 2006 – : Distinguished Visiting Professor, Technion – Israel Institute of Technology (5-year appointment October 2006 - September 2011 + 5 year extension October 2011 - September 2016).

10. 2004: MIT Distinguished Lecturer, MIT
11. 2003: Nieuwland Lecturer, University of Notre Dame
12. 2003: Medallion Lecturer of IMS (Institute for Mathematical Statistics) at Joint Statistical Meeting 2003, San Francisco, USA, August 2003.
13. 2003: J. Levi Prize of Israeli OR Society (joint with A. Ben-Tal, B. Golany and J.-Ph. Vial) for first version of paper IV.B1.95
14. 2001: Stieltjes Visiting Professorship, Stieltjes Institute, the Netherlands
15. 2001: Best Paper Award (Theory) at 5th International Conference on Optimization Techniques and Applications (joint with A. Ben-Tal and C. Roos) for paper IV.B2.3.
16. 2000-04 Adjunct Visiting Professorship, Faculty of Mathematics, University of Waterloo, Canada
17. 1998: Taub prize for excellence in research, Technion
18. 1998: Lecturer at XXVII Saint-Flour Summer School on Probability and Statistics
19. 1994-95: Gastello Fellowship
20. 1992: Einstein Visiting Fellowship, Israel Academy of Sciences

IV. Research, Scholarship, and Creative Activities

Overall data on publications (authored and co-authored): 7 published monographs, 2 published graduate textbooks, 163 published/accepted papers in referred journals, 16 papers and book chapters in referred Collections, 8 papers in referred Conference Proceedings.

Citation index as of 01/03/2026:

Google Scholar: 69,300, h=75 (since 2021: 19,667, h=45) ¹

Thomson Reuters Web of Science: 17,794 h=43 ²

MathSciNet: 8,087 ³

IV.A. Books, Book Chapters, and Edited Volumes

IV.A1. Published Books

Research monographs:

1. Nemirovsky, A., and Yudin, D. *Problem complexity and method efficiency in optimization*. - Nauka Publishers, Moscow, 1979 (in Russian); English translation: John Wiley & Sons, 1983.⁴
2. Goryashko, A., Nemirovskii, A., and Yudin, D. *Mathematical methods for design of control hard- and software*. - Radio i Sviaz, Moscow, 1982 (in Russian)
3. Nesterov, Yu., and Nemirovskii, A. *Interior point polynomial methods in Convex Programming*. - *SIAM Series in Applied Mathematics*, SIAM: Philadelphia, 1994⁵

¹<http://scholar.google.com/citations?user=3QxoymwAAAAJ>

²<https://www.webofscience.com/wos/author/record/287317>

³<https://mathscinet.ams.org/mathscinet/MRAuthorID/194108>

⁴https://www.google.com/books/edition/_/6ULvAAAAMAAJ?hl=en&gbpv=0

⁵<https://epubs.siam.org/doi/book/10.1137/1.9781611970791?>

4. Nemirovski, A. *Topics in Non-parametric Statistics*, in: M. Emery, A. Nemirovski, D. Voiculescu, *Lectures on Probability Theory and Statistics*, Ecole d'Eteé de Probabilités de Saint-Flour XXVIII – 1998, Ed. P. Bernard. - Lecture Notes in Mathematics v. 1738, Springer (2000), 87–285.⁶
5. Ben-Tal, A., and Nemirovski, A. *Lectures on Modern Convex Optimization: Analysis, Algorithms and Engineering Applications*, MPS-SIAM Series on Optimization, SIAM, Philadelphia, 2001.⁷
6. Ben-Tal, A., El Ghaoui, L., Nemirovski, A. *Robust Optimization*, Princeton University Press, 2009.⁸
Translated to Simplified Chinese, China Machine Press, 2024, ISBN: 9787111754978
7. Juditsky, A., Nemirovski, A. *Statistical Inference via Convex Optimization* – Princeton University Press, April 2020.⁹

Graduate textbooks:

8. Nemirovski, A. *Introduction to Linear Optimization* – World Scientific, 2024. ¹⁰ <https://www2.isye.gatech.edu/~nemirovs/WSPrinted.pdf>
9. F. Kilinc-Karzan, A. Nemirovski *Essential Mathematics for Convex Optimization* – graduate textbook, Cambridge University Press, 2025,¹¹ xv+444 pp (textbook) ,5+ 169 pp (solution manual)
<https://www2.isye.gatech.edu/~nemirovs/KKN.pdf>
https://www2.isye.gatech.edu/~nemirovs/KKN_SMM.pdf

IV.A2,IV.A4. Refereed Book Chapters/Papers in referred Collections

1. Nemirovskii, A. "Complexity of problems and efficient methods in Convex Programming." (in Russian) - in: E. Golshtein, Ed. *Mathematics of Economical Modeling*, Nauka Publishers, Moscow 1983
2. Nemirovskii, A. "Nonparametric estimation of functions satisfying differential inequalities." - in: R. Khasminskii, Ed. *Advances in Soviet Mathematics*, v. 12: "Selected Topics in Nonparametric Statistics" - American Mathematical Society, Providence, 1992
3. Ben-Tal, A., and Nemirovskii, A. "An interior point algorithm for Truss Topology Design." - in: *Topology Design of Structures*, Bendsoe, M.P. (Ed.), Proceedings of NATO Advanced Research Workshop Sesimbra, Portugal, 1992.
4. Nesterov, Yu., and Nemirovskii, A. "Homogeneous barriers and polynomial time methods in Nonlinear Programming" (in Russian) - in: V. Fedorov, V. Karmanov, Eds. *Voprosy Kybernetiki*, Moscow, 1992

⁶<https://link.springer.com/book/10.1007/BFb0106703>

⁷https://www.mathopt.org/pdfs/broch_mos_10.pdf

⁸<https://press.princeton.edu/books/hardcover/9780691143682/robust-optimization?srsId=AfmB0opQ8p2CH9tpNCAx5fMpS0wAH8XTvuAlfZ79PQv1Ja6CjEzElfE3>

⁹https://press.princeton.edu/books/hardcover/9780691197296/statistical-inference-via-convex-optimization?srsId=AfmB0op0c-sz-EGHzRnxVcOKCRX07ttf3fLT87VPeNtbSM9KP8W_w1nM

¹⁰<https://www.worldscientific.com/worldscibooks/10.1142/13457#t=aboutBook>

¹¹<https://www.cambridge.org/highereducation/books/essential-mathematics-for-convex-optimization/0772D4760EF7FA9498B25E051565ECE2#overview>

5. Nemirovskii, A., Nesterov, Yu., and Khachiyan, L. "Optimal methods in Convex Programming and polynomial time algorithms in Linear Programming" (in Russian). - in: E. Golshtein, Ed. *Optimization methods in Economic Modeling* - Nauka Publishers, Moscow 1991; English edition: K.-H. Elster, Ed., *Modern mathematical methods of optimization*, Akademie Verlag, Berlin, 1993
6. Nemirovski, A. "Polynomial time methods in Convex Programming" – in: J. Renegar, M. Shub and S. Smale, Eds., *The Mathematics of Numerical Analysis*, 1995 AMS-SIAM Summer Seminar on Applied Mathematics, July 17 – August 11, 1995, Park City, Utah. – Lectures in Applied Mathematics, v. 32 (1996): AMS, Providence, 543-589.
7. Ben-Tal, A., **Margalit, T.**, Nemirovski, A., "Robust Modeling of Multi-Stage Portfolio Problems", – H. Frenk, K. Roos, T. Terlaky, S. Zhang, Eds. *High Performance Optimization*, Kluwer Academic Publishers, 2000, 303-328.
8. Ben-Tal, A., and Nemirovski, A. "Structural Design via Semidefinite Programming" – R. Saigal, H. Wolkowicz, L. Vandenberghe, Eds. *Handbook on Semidefinite Programming*, Kluwer Academic Publishers, 2000, 443-468.
9. Ben-Tal, A., El Ghaoui, L., and Nemirovski, A. "Robust Semidefinite Programming" – R. Saigal, H. Wolkowicz, L. Vandenberghe, Eds. *Handbook on Semidefinite Programming*, Kluwer Academic Publishers, 2000, 139-162.
10. Nemirovski, A., and Rubinstein, R. "An efficient Stochastic Approximation algorithm for stochastic saddle point problems" – M. Dror, P. L'Ecuyer, F. Szidarovszky, Eds., *Modeling Uncertainty and examination of stochastic theory, methods, and applications*, Kluwer Academic Publishers, 2002, 155–184.
11. Nemirovski, A., Shapiro, A., "Scenario Approximations of Chance Constraints" – in: Calafiore, G., Dabbene, F. (Eds.), *Probabilistic and Randomized Methods for Design under Uncertainty*, Springer, 2006.
12. Nemirovski, A., Shapiro, A., "On complexity of stochastic programming problems" – in: A. Rubinov, Ed., *Continuous Optimization: Current Trends and Applications*, Springer, 2006.
13. Nemirovski, A., "Advances in Convex Optimization: Conic Programming" – in: Marta Sanz-Solé, Javier Soria, Juan L. Varona, Joan Verdera, Eds., *Proceedings of International Congress of Mathematicians, Madrid, August 22-30, 2006*, Volume 1, EMS-European Mathematical Society Publishing House, 2007, 413-444.
14. Juditsky, A., Nemirovski, A., "First Order Methods for Nonsmooth Large-Scale Convex Minimization, I: General Purpose Methods" – S. Sra, S. Nowozin, S. Wright, Eds., *Optimization for Machine Learning*, The MIT Press, 2012, 121-148.
15. Juditsky, A., Nemirovski, A., "First Order Methods for Nonsmooth Large-Scale Convex Minimization, II: Utilizing Problem's Structure" – S. Sra, S. Nowozin, S. Wright, Eds., *Optimization for Machine Learning*, The MIT Press, 2012, 149-184.
16. Harchaoui, Z., Juditsky, A., Nemirovski, A., and Ostrovskii, D. (2021) "Adaptive Denoising of Signals with Local Shift-Invariant Structure" – *Festschrift in Honor of Vladimir Spokoiny*, Springer Proceedings in Mathematics & Statistics (to appear).
E-print: arXiv:1806.04028v2 <https://arxiv.org/pdf/1806.04028v2.pdf>

IV.B. Referred Publications and Submitted Articles

IV.B1. Published and Accepted Journal Articles

1. Nemirovskii, A. "On converging series with positive decreasing terms." (in Russian) - *Vestnik MGU, Ser. Math. -Mekh.*, 1968, No. 1
2. Nemirovskii, A., and Shilov, G. "On axiomatic description of the Laplace operator for functions defined on Hilbert space." (in Russian) - *Funkcionalnyi Analiz i ego Prilogeniya*, **3:3** (1969) (the journal is translated into English as *Functional Analysis and Applications*)
3. Nemirovskii, A. "On certain sequence of algebras on Hilbert ball." (in Russian) - *Funkcionalnyi Analiz i ego Prilogeniya*, **5:1** (1969) (the journal is translated into English as *Functional Analysis and Applications*)
4. Nemirovskii, A. "On connection between non-commutativity and existence of generalized nilpotent elements in Banach algebras of certain classes." (in Russian) - *Vestnik MGU, Ser. Math.-Mekh.*, 1971, No. 6
5. Nemirovskii, A., Ochan, N., Redjuany, R. "On conditions of Riemann's summability of functions taking values in Banach spaces." (in Russian) - *Vestnik MGU, Ser. Math. - Mekh.*, 1972, No. 4
6. Nemirovskii, A., and Semenov, S. "On polynomial approximation of functions defined on Hilbert space." (in Russian) - *Matematicheskii Sbornik*, **92:10** (1973) (the journal is translated into English as *Mathematics of the USSR – Sbornik*)
7. Nemirovskii, A. "On polynomial approximation of functions defined on Hilbert space." (in Russian) - *Funkcionalnyi Analiz i ego Prilogeniya*, **7:4** (1973) (the journal is translated into English as *Functional Analysis and Applications*)
8. Nemirovskii, A. "On general theory of Laplace-Levy operator." (in Russian) - *Funkcionalnyi Analiz i ego Prilogeniya*, **8:3** (1974) (the journal is translated into English as *Functional Analysis and Applications*)
9. Nemirovskii, A., and Nemirovskii, M. "Some extensions of the Sample Theorem." (in Russian) - *Radiotekhnika i Elektronika*, **20:1** (1975)
10. Nemirovskii, A. "On Laplace-Levy operator on certain class of functions." (in Russian) - *Trudy Moskovskogo Matematicheskogo obshchestva*, **32** (1975) (the journal is translated into English as *Transactions of the Moscow Mathematical Society*)
11. Nemirovskii, A., and Nemirovskii, M. "Optimal interpolation of random processes by Kotelnikov's series." (in Russian) - *Radiotekhnika i Elektronika*, **20:1** (1975)
12. Nemirovskii, A., and Nemirovskii, M. "Asymptotically optimal discretization of a Gaussian random variable." (in Russian) - *Radiotekhnika i Elektronika*, **21:10** (1976)
13. Nemirovskii, A., and Nemirovskii, M. "Quasi-optimal discrete representation of Gaussian random processes." (in Russian) - *Radiotekhnika i Elektronika*, **21:12** (1976)
14. Yudin, D., and Nemirovskii, A. "Estimation of information-based complexity of Mathematical Programming." (in Russian) - *Ekonomika i Matematicheskie Metody*, **12:1** (1976), 128-142 (the journal is translated into English as *Matekon*)

15. Yudin, D., and Nemirovskii, A. "Information-based complexity and efficient methods of convex optimization." (in Russian) - *Ekonomika i Matematicheskie Metody*, **12:2** (1976), 357-369. (the journal is translated into English as *Matekon*)
16. Yudin, D., and Nemirovskii, A. "Information-based complexity of strongly convex optimization." (in Russian) - *Ekonomika i Matematicheskie Metody*, **13:3** (1977) (the journal is translated into English as *Matekon*)
17. Nemirovskii, A., and Yudin, D. "Optimization methods adaptive to the "essential" dimension of problem." (in Russian) - *Avtomatika i Telemekhanika*, 1977, No. 4 (the journal is translated into English as *Automation & Remote Control*)
18. Yudin, D., and Nemirovskii, A. "On efficiency of randomized procedures in optimization." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1977, No. 3 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
19. Goryashko, A., and Nemirovskii, A. "On information-based cost of computation a Boolean function." (in Russian) - *Problemy Peredachi Informacii*, **14:1** (1978) (the journal is translated into English as *Problems of Information Transmission*)
20. Nemirovskii, A., and Yudin, D. "On Cezari's convergence of the steepest descent method for approximating saddle point of convex-concave functions." (in Russian) - *Doklady Akademii Nauk SSSR*, **239:5** (1978) (English translation: *Soviet Math. Dokl.* **19:2** (1978))
21. Nemirovskii, A., and Yudin, D. "Efficient methods for large-scale convex problems." (in Russian) - *Ekonomika i Matematicheskie Metody*, **15:1** (1979), 135-152 (the journal is translated into English as *Matekon*)
22. Goryashko, A., and Nemirovskii, A. "Reliable computations by universal automata with unreliable elements." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1980, No. 3 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
23. Nemirovskii, A. "Efficient iterative algorithms for variational inequalities with monotone operators." (in Russian) - *Ekonomika i Matematicheskie Metody*, **17:2** (1981), 344-359 (the journal is translated into English as *Matekon*)
24. Nemirovskii, A. "On recurrent estimation of the parameters of linear plants." (in Russian) - *Avtomatika i Telemekhanika*, 1981, No. 4 (the journal is translated into English as *Automation & Remote Control*)
25. Nemirovskii, A. "On stochastic approximation under dependent disturbances." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1981, No. 1 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
26. Nemirovskii, A. "On optimal recurrent algorithms for estimating the parameters of linear plants." (in Russian) - *Avtomatika i Telemekhanika*, 1981, No. 6 (the journal is translated into English as *Automation & Remote Control*)
27. Nemirovskii, A. "On forecast under uncertainty." (in Russian) - *Problemy Peredachi Informacii*, **17:4** (1981) (the journal is translated into English as *Problems of Information Transmission*)

28. Nemirovskii, A. "Orth-method for smooth convex optimization." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1982, No. 2 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
29. Nemirovskii, A., and Yudin, D. "Information-based complexity of Mathematical Programming." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1983, No. 1 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
30. Nemirovskii, A., Polyak, B., and Tsybakov, A. "Estimations of maximum likelihood type for nonparametric regression." (in Russian) - *Doklady Akademii Nauk SSSR*, **273:6** (1983) (English translation: *Soviet Math. Dokl.* **28:3** (1983), 788–792)
31. Nemirovskii, A., Polyak, B., and Tsybakov, A. "Signal processing by the nonparametric maximum likelihood method." (in Russian) - *Problemy Peredachi Informacii*, **20:3** (1984), 29–46 (the journal is translated into English as *Problems of Information Transmission*)
32. Nemirovskii, A., and Polyak, B. "Iterative procedures for ill-posed linear problems with precise data, I, II." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1984, No. 2 (I) and No. 3 (II) (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
33. Nemirovskii, A., and Tsyppkin, Ja. "On optimal adaptive control." (in Russian) - *Avtomatika i Telemekhanika*, 1984, No. 12 (the journal is translated into English as *Automation & Remote Control*)
34. Nemirovskii, A. "On nonparametric estimation of smooth regression functions." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1985, No. 3 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
35. Nemirovskii, A., Polyak, B., and Tsybakov, A. "Rate of convergence for nonparametric maximum likelihood estimates." (in Russian) - *Problemy Peredachi Informacii*, **21:4** (1985), 17–33 (the journal is translated into English as *Problems of Information Transmission*)
36. Nemirovskii, A., and Nesterov, Yu. "Optimal methods for smooth convex optimization." (in Russian) - *Jurnal Vychislitel'noi Matematiki i Matematicheskoi Fiziki*, **25:2** (1985) (the journal is translated into English as *USSR J. Comput. Math. & Math. Phys.*)
37. Nemirovskii, A., Polyak, B., and Tsyppkin, Ja. "Optimal stochastic approximation algorithms for the case of multiplicative noise." (in Russian) - *Doklady Akademii Nauk SSSR*, **284:3** (1985) (the journal is translated into English as *Soviet Math. Dokl.*)
38. Nemirovskii, A., and Teslya, I. "On optimal choice of resistors in matrix VLSI." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1986, No. 3 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
39. Ibragimov, I., Nemirovskii, A., and Khasminskii, R. "Some problems of nonparametric estimation under Gaussian noise." (in Russian) - *Teoria veroyatnostei*, **31:3** (1986) (the journal is translated into English as *Probability Theory and Math. Statist.*)
40. Nemirovskii, A. "On regularization by the conjugate gradient algorithm as applied to ill-posed problems." (in Russian) - *Jurnal Vychislitel'noi Matematiki i Matematicheskoi*

- Fiziki* , **26:3** (1986) (the journal is translated into English as *USSR J. Comput. Math. & Math. Phys.*)
41. Nemirovskii, A. "On an algorithm of Karmarkar's type." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1987, No. 1 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
 42. Nemirovskii, A., and Khasminskii, R. "Nonparametric estimation of functionals of a signal observed under Gaussian white noise." (in Russian) - *Problemy Peredachi Informacii*, **23:3** (1987) (the journal is translated into English as *Problems of Information Transmission*)
 43. Nemirovskii, A. "A new polynomial time algorithm for linear programming." (in Russian) - *Doklady Akademii Nauk SSSR*, **298:6** (1988) (English translation: *Soviet Mathematics: Doklady* **37:1** (1988), 264-269)
 44. Nesterov, Yu., and Nemirovskii, A. "Polynomial time barrier methods in convex programming." (in Russian) - *Ekonomika i Matematicheskie Metody*, **24:6** (1988) (the journal is translated into English as *Matekon*)
 45. Nemirovskii, A., and Shil'man, S. "A recurrent stochastic approximation algorithm for estimating eigenvalues and eigenvectors." (in Russian) - *Izvestia AN SSSR, Ser. Tekhnicheskaya Kibernetika*, 1988, No. 6 (the journal is translated into English as *Engineering Cybernetics. Soviet J. Computer & Systems Sci.*)
 46. Golshtein, E., Nemirovskii, A., and Nesterov, Yu. "On recent progress in optimization." (in Russian) - *Ekonomika i Matematicheskie Metody*, **26:1** (1990) (the journal is translated into English as *Matekon*)
 47. Nemirovskii, A. "On necessary conditions for effective estimating functionals of a nonparametric signal observed under white Gaussian noise." (in Russian) - *Teoria veroyatnostei*, **35:1** (1990) (the journal is translated into English as *Probability Theory and Math. Statist.*)
 48. Nemirovskii, A. "On optimality of Krylov's information when solving linear operator equations." - *Journal of Complexity*, **7** (1991), 121-130
 49. Nemirovskii, A., and Nenahov, E. "Multistep" Ellipsoid algorithm" (in Russian). - *Ekonomika i Matematicheskie Metody*, **27:6** (1991) (the journal is translated into English as *Matekon*)
 50. Nesterov, Yu., and Nemirovskii, A. "Acceleration and parallelization of the path-following interior point methods for a linearly constrained quadratic programming problem". - *SIAM J. Optimization*, **1:4** (1991)
 51. Nemirovskii, A. "Information-based complexity of linear operator equations." - *Journal of Complexity*, **8** (1992), 153-175
 52. Nesterov, Yu., and Nemirovskii, A. "Conic duality and its applications in Convex Programming" - *Optimization and Software* **1** (1992), 95-115
 53. Nemirovski, A. "Several NP-hard problems arising in Robust Stability Analysis" - *Math. Control Signals Systems* **6** (1993), 99-105
 54. Ben-Tal, A., and Nemirovskii, A. "Potential reduction polynomial time method for Truss Topology Design" - *SIAM J. Optimization* **4** (1994), 596-612

55. Nemirovski, A. "On Parallel Complexity of Nonsmooth Convex Optimization" - *Journal of Complexity* **10** (1994), 451-463
56. Nesterov, Yu., and Nemirovski, A. "An Interior Point Method for Generalized Linear-Fractional Programming" - *Mathematical Programming* **69:1** (1995), 177-204
57. Lemarechal, C., Nemirovski, A., and Nesterov, Yu. "New variants of bundle methods" - *Mathematical Programming* **69:1** (1995), 111-148
58. Nemirovski, A. "On polynomiality of the method of analytic centers for fractional problems" - *Mathematical Programming*, **73** (1996), 175-198.
59. Nemirovski, A., and Scheinberg, K. "Extension of Karmarkar's algorithm onto convex quadratically constrained quadratic problems" - *Mathematical Programming* **72:3** (1996), 273-290
60. Nemirovski, A. "Long-step method of analytic centers for fractional problems" - *Mathematical Programming* **77:2** (1997), 191-224
61. Gahinet, P., and Nemirovski, A. "The Projective method for solving Linear Matrix Inequalities" - *Mathematical Programming* **77:2** (1997), 163-190
62. **Goldenshluger, A.**, and Nemirovski, A. "Spatial adaptive estimation of smooth non-parametric regression functions" - *Mathematical Methods of Statistics* **6** (1997), 135-170.
63. **Goldenshluger, A.**, and Nemirovski, A. "Spatial adaptive estimation of functions satisfying differential inequalities" - *IEEE Transactions on Information Theory* **43** (1997), 872-889.
64. Ben-Tal, A., and Nemirovski, A. "Stable Truss Topology Design via Semidefinite Programming" - *SIAM Journal on Optimization* **7:4** (1997), 991-1016.
65. Nemirovsky A.S., "A method for general quasiconvex minimization" (in Russian) - *Ekonomika i Matematicheskie Metody*, **33:3** (1997), 154-159 (the journal is translated into English as *Matekon*)
66. Nesterov, Yu., Nemirovski, A. "Multi-parameter surfaces of analytic centers and long-step surface-following interior point methods" - *Mathematics of Operations Research* **23** (1998), 1-38.
67. Ben-Tal, A., and Nemirovski, A. "Robust Convex Optimization" - *Mathematics of Operations Research* **23:4** (1998).
68. Lepskii, O., Nemirovski, A., and Spokoiny, V. "On estimation of the L_r norm of a regression function" - *Probability Theory and Related Fields* **113** (1999), 221-253.
69. Ben-Tal, A., and Nemirovski, A. "Robust solutions of uncertain linear programs", *OR Letters* **25** (1999), 1-13.
70. Ben-Tal, A., Kočvara, M., Nemirovski, A., and Zowe, J. "Free Material Design via Semidefinite Programming. The Multiload Case with Contact Conditions" - *SIAM J. of Optimization* **9** (1999), 813-832, and *SIAM Review*. **42** (2000), 695-715.
71. Nemirovski, A., Roos, C., and Terlaky, T. "On maximization of quadratic form over intersection of ellipsoids with common center" - *Mathematical Programming* **86** (1999), 463-473.

72. Nemirovski, A. "On self-concordant convex-concave functions" – *Optimization Methods and Software* **11&12** (1999), 303-384.
73. Nemirovski, A., and Rothblum, U. "On complexity of matrix scaling" – *Linear Algebra and Applications* **302/303** (1999), 435-460.
74. **Lieber, D.**, Nemirovski, A., Rubinstein. R., "A fast Monte Carlo method for evaluating reliability indexes" – *IEEE Transactions on Reliability* **48:3** (1999), 256-261.
75. Ben-Tal, A., and Nemirovski, A. "Robust solutions of Linear Programming problems contaminated with uncertain data", *Mathematical Programming* **88** (2000), 411-424.
76. Ben-Tal, A., Jarre, F., Kočvara, M., Nemirovski, A., and Zowe, J. "Optimal design of trusses under a nonconvex global buckling constraint", *Optimization and Engineering* **1:2** (2000), 189-213.
77. Kočvara, M., Zowe, J., and Nemirovski, A., "Cascading—An approach to robust material optimization", *Computers & Structures* **76** (2000), 431-442.
78. Juditsky, A., and Nemirovski, A., "Functional aggregation for nonparametric regression" – *Annals of Statistics* **28** (2000), 681-712.
79. Ben-Tal, A., and Nemirovski, A. "On polyhedral approximations of the second-order cone" – *Mathematics of Operations Research* **26:2** (2001)
80. Ben-Tal, A., **Margalit, T.**, and Nemirovski, A., "The Ordered Subsets Mirror Descent optimization method with applications to Tomography" – *SIAM Journal on Optimization* **12** (2001), 79-108.
81. Juditsky, A., and Nemirovski, A. "On nonparametric tests of positivity/monotonicity/convexity" – *Annals of Statistics* **30:2** (2002)
82. Levkovitz, R., Falikman, D., Zibulevski, M., Ben-Tal, A., and Nemirovski, A., "The design and implementation of COSEM, an iterative algorithm for a fully 3D listmode data" – *IEEE Trans. on Medical Imaging* **20** (2001), 633 - 642.
83. Ben-Tal, A., and Nemirovski, A., "Robust Optimization — Methodology and Applications", *Mathematical Programming Series B*, **92** (2002), 453-480.
84. Ben-Tal, A., and Nemirovski, A., "On tractable approximations of uncertain linear matrix inequalities affected by interval uncertainty", *SIAM Journal on Optimization* **12** (2002), 811-833.
85. Ben-Tal, A., Nemirovski, A., and Roos, C., "Robust solutions of uncertain quadratic and conic-quadratic problems", *SIAM Journal on Optimization* **13** (2002), 535-560.
86. Feuer, A., Nemirovski, A., "On sparse representation in pairs of bases", *IEEE Transactions on Information Theory* **49** (2003), 1579-1581.
87. Dan Barb, F., Ben-Tal, A., and Nemirovski, A., "Robust dissipativity of interval uncertain system" – *SIAM Journal on Control and Optimization* **41** (2003), 1661 – 1695.
88. Ben-Tal, A., Nemirovski, A., Roos, C., "Extended Matrix Cube Theorems with applications to μ -Theory in Control" – *Mathematics of Operations Research* **28** (2003), 497–523.

89. Ben-Tal, A., Goryashko, A., **Guslitzer, E.**, and Nemirovski, A., “Adjustable Robust Solutions of Uncertain Linear Programs”, *Mathematical Programming* **99** (2004), 351–376.
90. Eldar, Y.C., Ben-Tal, A., Nemirovski, A., “Linear minimax regret estimation of deterministic parameters with bounded data uncertainties” *IEEE Trans. on Signal Processing* **52** (2004), 2177–2188.
91. Nemirovski, A., “Prox-method with rate of convergence $O(1/t)$ for variational inequalities with Lipschitz continuous monotone operators and smooth convex-concave saddle point problems” – *SIAM Journal on Optimization* **15** (2004), 229–251.
92. Ben-Tal, A., Nemirovski, A. “Non-Euclidean restricted memory level method for large-scale convex optimization” – *Mathematical Programming* **102** (2005), 407–456.
93. Nemirovski, A., and Tunçel, L., “Cone-free” primal-dual path-following and potential-reduction polynomial time interior-point methods” – *Mathematical Programming* **102** (2005), 261–295.
94. Eldar, Y., Ben-Tal, A., Nemirovski, A., “Robust mean-squared error estimation in the presence of model uncertainties” – *IEEE Trans. on Signal Processing* **53** (2005), 168–181.
95. Ben-Tal, A., Golany, B., Nemirovski, A., Vial, J.-Ph., “Supplier-Retailer Flexible Commitments Contracts: A Robust Optimization Approach” – *Manufacturing & Service Operations Management* **7:3** (2005), 248–273.
96. Ben-Tal, A., Boyd, S., Nemirovski, A., “Extending the Scope of Robust Optimization: Comprehensive Robust Counterparts of Uncertain Problems” – *Mathematical Programming Ser. B* **107:1-2** (2006), 63–89.
97. Nemirovski, A., Shapiro, A., “Convex Approximations of Chance Constrained Programs”, *SIAM Journal on Optimization* **17:4** (2006), 969–996.
98. Nemirovski, A., “Sums of Random Symmetric Matrices and Quadratic Optimization under Orthogonality Constraints” – *Mathematical Programming*, **109:2-3** (2007), 283–317.
99. **Lu, Z.**, Monteiro, R.D.C., Nemirovski, A., “Large-Scale Semidefinite Programming via Saddle Point Mirror-Prox Algorithm” – *Mathematical Programming* **109:2-3** (2007), 211–237.
100. Gal, S., Landsberger, M., Nemirovski, A., “Participation in auctions” – *Games and Economic Behaviour* **60:1** (2007), 75–103.
101. Ben-Tal, A., Nemirovski, A., “Selected Topics in Robust Convex Optimization” – *Mathematical Programming*, **112:1** (2008), 125–158.
102. **Boni, O.**, Ben-Tal, A., Nemirovski, A., “Robust solutions to conic quadratic problems and their applications” – *Optimization and Engineering* **9** (2008), 1–18.
103. Nesterov, Yu., Nemirovski, A., “Primal Central Paths and Riemannian Distances for Convex Sets” – *Foundations of Computational Mathematics* **8:5** (2008), 533–560.
104. Nemirovski, A., Todd, M., “Interior-point methods for optimization” – *Acta Numerica* **17** (2008), 191–234.

105. Ben-Tal, A., Nemirovski, A., “On safe tractable approximations of chance constrained Linear Matrix Inequalities” – *Mathematics of Operations Research* **34:1** (2009), 1-25.
106. Nemirovski, A., Juditsky, A. **Lan, G.**, Shapiro, A., “Stochastic Approximation Approach to Stochastic Programming” – *SIAM Journal on Optimization* **19:4** (2009), 1574-1609.
107. Juditsky, A., Nemirovski, A., “Non-parametric estimation by Convex Programming” – *Annals of Statistics* **37:5A** (2009), 2278-2300.
108. Juditsky, A., Nemirovski, A., “Nonparametric denoising of signals with unknown local structure, I: Oracle inequalities” – *Applied and Computational Harmonic Analysis* **27** (2009), 157-179.
109. Nemirovski, A., Onn, S., Rothblum, U., “Accuracy certificates for computational problems with convex structure” – *Mathematics of Operations Research* **35:1** (2010), 52-78.
110. Juditsky, A., Nemirovski, A., “Nonparametric denoising signals with unknown local structure, II: Nonparametric function recovery” – *Applied and Computational Harmonic Analysis*, **29:3** (2010) 354-367.
111. Tunçel, L., Nemirovski, A., “Self-Concordant Barriers for Convex Approximations of Structured Convex Sets” – *Foundations of Computational Mathematics* **10:5** (2010), 485-525
112. Nemirovski, A. “Discussion on: ”Why Is Resorting to Fate Wise? A Critical Look at Randomized Algorithms in Systems and Control”” *European Journal of Control* **5** (2010), 432-436.
113. Juditsky, A., Nemirovski, A., “On verifiable sufficient conditions for sparse signal recovery via ℓ_1 minimization” – *Mathematical Programming Series B*, **127** (2011), 57-88.
114. Juditsky, A., **Kilinç Karzan, F.**, Nemirovski, A., “Verifiable conditions of ℓ_1 -recovery of sparse signals with sign restrictions” – *Mathematical Programming Series B*, **127** (2011), 89-122
115. Juditsky, A., **Kilinç Karzan, F.**, Nemirovski, A., “On Low Rank Matrix Approximations with Applications to Synthesis Problem in Compressed Sensing” – *SIAM Journal on Matrix Analysis and Applications* **32:3** (2011), 1019-1029
116. Juditsky, A., Nemirovski, A., Tauvel, C., “Solving variational inequalities with Stochastic Mirror Prox algorithm” – *Stochastic Systems* **1:1** (2011), DOI: 10.1214/10-SSY011, 17-58
117. Juditsky, A., Nemirovski, A., “Accuracy guaranties for ℓ_1 recovery” – *IEEE Transactions on Information Theory* **57:12** (2011), 7818-7839.
118. **Lan, G.**, Nemirovski, A., Shapiro, A., “Validation analysis of mirror descent stochastic approximation method” – *Mathematical Programming* **134:2** (2012), 425-458.
119. Sarwar, A., Nemirovski, A., Shapiro, B., “Optimal Halbach permanent magnet designs for maximally pulling and pushing nanoparticles” – *Journal of Magnetism and Magnetic Materials* **324:5** (2012), 742-754, DOI: 10.1016/j.jmmm.2011.09.008
120. Nemirovski, A., “On Safe Tractable Approximations of Chance Constraints” – *European Journal of Operational Research* **219** (2012), 707-718.

121. Ben-Tal, A., Bhadra, S., Bhattacharyya, C., Nemirovski, A., “Efficient methods for Robust Classification under Uncertainty in Kernel Matrices” – *Journal of Machine Learning Research* **13** (2012), 2923-2954.
122. Juditsky, A., **Kilinç Karzan, F.**, Nemirovski, A., Polyak, B., “Accuracy Guarantees for ℓ_1 recovery of block-sparse signals” – *Annals of Statistics* **40:6** (2012), 3077-3107.
123. Juditsky, A., **Kilinç Karzan, F.**, Nemirovski, A., “Randomized first order algorithms with applications to ℓ_1 -minimization” – *Mathematical Programming* **142:1-2** (2013), 269-310.
124. Baes, M., Buergisser, M., Nemirovski, A., “Randomized Mirror-Prox method for solving structured large-scale matrix saddle-point problems” – *SIAM Journal on Optimization* **23:2** (2013), 934-962.
125. Juditsky, A., **Kilinç Karzan, F.**, Nemirovski, A., “On unified view of nullspace-type conditions for recoveries associated with general sparsity structures” – *Linear Algebra and its Applications* **441** (2014), 124-151.
126. Nesterov, Yu., Nemirovski, A., “On first order algorithms for ℓ_1 /nuclear norm minimization” – *Acta Numerica* **22** (2013), 509-575.
127. **Cox, B.**, Juditsky, A., Nemirovski, A. “Dual subgradient algorithms for large-scale non-smooth learning problems” – *Mathematical Programming Series B*, **148:1-2** (2014), 143-180.
128. Goryashko, A., Nemirovski, A. “Optimization of energy cost in water distribution systems under uncertain demand” – *Avtomatika and Telemekhanika* 2014 No. 10, 52-72 ((in Russian; English translation: *Automation and Remote Control* **75:10** (October 2014), 1754-1769)
129. Nesterov, Yu., Nemirovski, A. “Finding stationary states of Markov chains by iterative methods” – *Applied Mathematics and Computation* **255** (2015), 58–65.
130. Harchaoui, Z., Juditsky, A., Nemirovski, A. “Conditional Gradient Algorithms for Norm-Regularized Smooth Convex Optimization” – *Mathematical Programming* **152:1-2** (2015), 75–112.
131. **Guzman, C.**, Nemirovski, A. “On Lower Complexity Bounds for Large-Scale Smooth Convex Optimization” – *Journal of Complexity* **31** (2015), 1-14.
132. Ben-Tal, A., Nemirovski, A. “On solving large scale polynomial convex problems by randomized first-order algorithms” – *Mathematics of Operations Research* **40:2** (2015), 474-494.
133. **He, N.**, Juditsky, A., Nemirovski, A. “Mirror Prox Algorithm for Multi-Term Composite Minimization and Semi-Separable Problems” – *Computational Optimization and Applications* **61:2** (2015), 275-319.
134. Juditsky, A., Nemirovski, A. “On detecting harmonic oscillations” – *Bernoulli* **21:2** (2015), 1134-1165.
135. Juditsky, A., Nemirovski, A. “On sequential hypotheses testing via convex optimization” – *Avtomatika i Telemekhanika* 2015 No. 5, 100-120 (in Russian; English translation *Automation and Remote Control* **76:5** (2015), 809-825)

136. Goldenshluger, A., Juditsky, A., Nemirovski, A. “Hypothesis testing by convex optimization” – *Electron. J. Statist.* **9:2** (2015), 1645–1712.
doi:10.1214/15-EJS1054. <http://projecteuclid.org/euclid.ejs/1438951881>
137. Goldenshluger, A., Juditsky, A., Nemirovski, A. Rejoinder of ”Hypothesis testing by convex optimization” – *Electron. J. Statist.* **9:2** (2015), 1744–1748, DOI: 10.1214/15-EJS1054REJ, ISSN: 1935-7524
138. Juditsky, A., Nemirovski, A. “Solving Variational Inequalities with Monotone Operators on Domains Given by Linear Minimization Oracles” – *Mathematical Programming* **156:1-2** (2016), 221–256.
139. Juditsky, A. Nemirovski, A. “Hypothesis Testing via affine detectors” – *Electronic Journal of Statistics* **10:2** (2016), 2204–2242. doi:10.1214/16-EJS1170
140. Gordon, A., Nemirovski, A. “Absence of eigenvalues for quasi-periodic lattice operators with Liouville frequencies” – *International Mathematics Research Notices* **2017:10** (2017), 2948-2963.
141. Cox, B., Juditsky, A., Nemirovski, A. “Decomposition Techniques for Bilinear Saddle Point Problems and Variational Inequalities with Affine Monotone Operators” – *Journal of Optimization Theory and Applications* **172:2** (2017), 402-435. doi:10.1007/s10957-016-0949-3
142. Juditsky, A., Nemirovski, A. “Near-Optimality of Linear Recovery in Gaussian Observation Scheme under $\|\cdot\|_2^2$ -Loss” – *Annals of Statistics* **46:4** (2018), 1603-1629. E-print: arXiv:1602.01355 <https://arxiv.org/pdf/1602.01355.pdf> doi: 10.1214/17-AOS1596
143. Guigues, V., Juditsky, A., Nemirovski, A. “Non-asymptotic confidence bounds for the optimal value of a stochastic program” – *Optimization Methods and Software*, **32:5** (2017), 1033-1058. E-print: arXiv:1601.07592 <https://arxiv.org/pdf/1601.07592.pdf> – 2017 Charles Broyden prize of Optimization Methods and Software Editorial Board and Taylor & Francis
<http://explore.tandfonline.com/page/est/charles-broyden-prize>.
144. Cao, Y., Guigues, V., Juditsky, A., Nemirovski, A., Xie, Y. “Change Detection via Affine and Quadratic Detectors” – *Electronic J. of Statistics* **12:1** (2018), 1-57, doi:10.1214/17-EJS1373 <https://projecteuclid.org/euclid.ejs/1514970025>.
arXiv:1608.00524 <https://arxiv.org/pdf/1608.00524.pdf>
145. Juditsky, A., Nemirovski, A. “Near-Optimality of Linear Recovery from Indirect Observations,” *Mathematical Statistics and Learning* **1:2** (2018), 171-225. E-print: arXiv:1704.00835 <https://arxiv.org/pdf/1704.00835.pdf> doi:10.4171/MSL/1-2-2
146. Juditsky, A., Nemirovski, A. “Near-Optimal Recovery of Linear and N -Convex Functions on Unions on Convex Sets” – *Information and Inference: A Journal of the IMA* **9:2** (2020), 423-453. E-print: arXiv:1804.00355 <https://arxiv.org/pdf/1804.00355.pdf>
147. Nazin, A.V., Nemirovsky, A.S., Tsybakov, A.B., Juditsky, A.B. “Algorithms of Robust Stochastic Optimization Based on Mirror Descent Method” – *Avtomatika i Telemekhanika* 2019, No. 9, 64–90 (in Russian; English translation *Automation and Remote Control* **80:9** (2019), 1607–1627).

148. Juditsky, A., Nemirovski, A. "Signal Recovery by Stochastic Optimization" – *Avtomatika i Telemekhanika* 2019, No. 10, 153-172 (in Russian; English translation *Automation and Remote Control* **80:10** (2019), 1878–1893) E-print: arXiv:1903.07349 <https://arxiv.org/pdf/1903.07349.pdf>
149. Guigues, V., Juditsky, A., Nemirovski, A. "Hypothesis Testing via Euclidean Separation" – *Annales de l'Institut Henri Poincaré, Probability and Statistics* **56:3** (2020), 1929–1957. E-print: arXiv:1705.07196 <https://arxiv.org/pdf/1705.07196.pdf>
150. Juditsky, A., Nemirovski, A. "On Polyhedral Estimation of Signals via Indirect Observations." – *Electronic Journal of Statistics* **14:1** (2020), 458-502. E-print: arXiv:1803.06446 <https://arxiv.org/pdf/1803.06446.pdf>
151. Juditsky, A., Nemirovski, A. "Estimating Linear and Quadratic forms via Indirect Observations" – *Bernoulli* **26:4** (Nov 2020), 2639–2669. E-print: arXiv:1612.01508 <https://arxiv.org/pdf/1612.01508.pdf>
152. Juditsky, A., Nemirovski, A., Xie, Yao, Xie, Liyan "Convex Parameter Recovery for Interacting Marked Processes." – *IEEE Journal on Selected Areas in Information Theory* **1:3** (2020), 799-813, doi: 10.1109/JSAIT.2020.3040999 E-print: arXiv:2003.12935 <https://arxiv.org/pdf/2003.12935.pdf>
153. **Kotsalis, G.**, Lan, G., Nemirovski, A. "Convex optimization for finite horizon robust covariance control of linear stochastic systems" – *SIAM Journal on Control and Optimization* **59:1** (2021), 296-319. E-print: arXiv:2007.00132 <https://arxiv.org/pdf/2007.00132.pdf>
154. Guigues. V., Juditsky, A., Nemirovski, A. "Constant Depth Decision Rules for multi-stage optimization under uncertainty" – *European Journal of Operational Research* **295:1** (November 2021), 223-232, E-print: arXiv:2005.13387 <https://arxiv.org/pdf/2005.13387.pdf>
155. Juditsky, A., Nemirovski, A. "On well-structured convex-concave saddle point problems and variational inequalities with monotone operators" – *Optimization Methods and Software*, **37:5** (2022), 1567-1602. E-print: arXiv:2102.01002 <https://arxiv.org/abs/2102.01002>
156. Anatoli Juditsky, Arkadi Nemirovski "Aggregating estimates by convex optimization" – *Mathematical Statistics and Learning* **5:1/2** (2022), 55–116. E-print: arXiv:2107.07836 <https://arxiv.org/pdf/2107.07836.pdf>
157. Anatoli Juditsky, **Georgios Kotsalis**, Arkadi Nemirovski "Tight Computationally Efficient Approximation of Matrix Norms with Applications," *Open Journal of Mathematical Optimization* **3:7** (2022), 1-38. E-print: arXiv:2110.04389, <https://arxiv.org/pdf/2110.04389.pdf>
158. Juditsky, A., Nemirovski, A. "On Design of Polyhedral Estimates in Linear Inverse Problems" – *SIAM Journal on Mathematics of Data Science* **6:1** (2024), 76-96 <https://epubs.siam.org/doi/epdf/10.1137/22M1543331> E-print: arXiv:2212.12516 <https://arxiv.org/pdf/2212.12516.pdf>
159. Juditsky, A., Nemirovski, A.(2022) "Aggregating regular norms" – *Israel Journal of Mathematics* **TBD** (2025), 1–30 DOI: 10.1007/s11856-025-2853-8, E-print: arXiv:2210.16664 <https://arxiv.org/pdf/2210.16664.pdf>

160. Bekri, Y., Juditsky, A., Nemirovski, A. “First order algorithms for computing linear and polyhedral estimates” - *Open Journal of Mathematical Optimization*, Volume 5 (2024), article no. 7, 15 p. doi : 10.5802/ojmo.35.
<https://ojmo.centre-mersenne.org/articles/10.5802/ojmo.35/>
161. Bekri, Y., Juditsky, A., Nemirovski, A. (2023) “Estimation from indirect observations under stochastic uncertainty in observation matrix” - *Journal of Optimization Theory and Applications* **205** paper # **56** (2025), E-Print: arXiv:2309.06563 <https://arxiv.org/pdf/2309.06563.pdf>
162. Bekri, Y., Juditsky, A., Nemirovski, A. (2023) “Robust signal recovery under uncertain-but-bounded perturbations in observation matrix” - *Journal of Optimization Theory and Applications* **205** paper # **55** (2025), E-Print: arXiv:2309.06563 <https://arxiv.org/pdf/2309.06563.pdf>¹²
163. Bekri, Y., Juditsky, A., Nemirovski, A. (2024) “On robust recovery of signals from indirect observations” - *Automation and Remote Control* **86:8** (2025), 718–739
E-Print arXiv <https://arxiv.org/abs/2501.01935>

IV.B2. Conference Presentations with Proceedings (Referred)

1. Nemirovskii, A. ”Smooth and polynomial approximation of continuous mappings of Banach spaces.” (in Russian) - in: *Proceedings of the All-Union Workshop on differential equations with infinitely many independent variables, Erevan, 1974*
2. Nemirovskii, A., and Gahinet, P. ”The Projective method for Solving Linear Matrix Inequalities”, *Proceedings of the American Control Conference*, Maryland, June 1994.
3. Ben-Tal, A., Nemirovski, A., Roos, C., ”Robust versions of convex quadratic and conic-quadratic problems”, D. Li, Ed., *Proceedings of the 5th International Conference on Optimization Techniques and Applications (ICOTA 2001)*, **4** (2001), 1818-1825.
4. Nemirovski, A., “On tractable approximations of randomly perturbed convex constraints” – *Proceedings of the 42nd IEEE Conference on Decision and Control Maui, Hawaii USA, December 2003*, 2419-2422.
5. Juditsky, A., Ljung, L., Nazin, A., Nemirovski, A. “Minimax Confidence Intervals for Pointwise Nonparametric Regression Estimation” – in: *Proceedings of IFAC Symposium on System Identification*, St. Malo July 2009.
6. Juditsky, A., **Kılınç Karzan, F.**, Nemirovski, A., Polyak, B.T., “On the accuracy of ℓ_1 -filtering of signals with block-sparse structure” – in: J. Shawe-Taylor, R.S. Zemel, P. Bartlett, F. Pereira, K.Q. Weinberger, Eds. *Advances in Neural Information Processing Systems* **24** (2011), 1666-1674.
7. Harchaoui, Z., Juditsky, A., Nemirovski, A., Ostrovsky, D. “Adaptive Recovery of Signals by Convex Optimization” – P. Grünwald, E. Hazan, S. Kale, Eds. *Proceedings of The 28th Conference on Learning Theory, JMLR: Workshop and Conference Proceedings* vol **40** (2015) 929-955

¹²Size limitations resulted in splitting preprint <https://arxiv.org/pdf/2309.06563.pdf> into two accepted for publication papers IV.B2..61-162

8. Ostrovsky, D., Harchaoui, Z., Juditsky, A., Nemirovski, A. "Structure-Blind Signal Recovery." – in: D.D. Lee, M. Sugiyama, U.V. Luxburg, I. Guyon, R. Garnett, Eds. *Advances in Neural Information Processing Systems 29* (2016), 4817-4825.

IV.B3. Other Referred Material

1. Nemirovskii, A. "On uniform approximation of a Lipschitz continuous transformation defined on a Banach space by a Gateau differentiable transformation." (in Russian) - *Trudy kafedry Teorii Funkcii i Funkcionalnogo analiza MGU*, 1974, No. 1
2. Nemirovskii, A. "On the definition of a harmonic function on Hilbert space." (in Russian) - *Trudy kafedry Teorii Funkcii i Funkcionalnogo analiza MGU*, 1974, No. 1
3. Yudin, D., and Nemirovskii, A. "On efficiency of randomized procedures in control problems." (in Russian) - in: *Effectivnost' sluchainogo poiska*, No. 7, Riga, 1978

IV.B4. Submitted Journal Papers

IV.C. Other Publications and Creative Products

IV.C1. Software

1. Interior point polynomial time solvers (algorithms and codes) for Linear and Linear-Fractional Semidefinite Programming in "LMI Control Toolbox" for MATLAB, see
Gahinet, P., Nemirovski, A., Laub, A.J., and Chilali, M. "LMI Control Toolbox", The MathWorks Partner Series, The MathWorks Inc., 1995

IV.C2. Manuscripts

1. Juditsky, A., Nemirovski, A. (2008) *Large Deviations of Vector-Valued Martingales in 2-Smooth Normed Spaces*. E-print: arXiv:0809.0813 <https://arxiv.org/pdf/0809.0813.pdf>
2. Juditsky, A., Nemirovski, A., Zibulevsky, M. (2022) *Radiation design in computed tomography via convex optimization* E-print: arXiv:2301.03379 <https://arxiv.org/pdf/2301.03379.pdf>
3. Juditsky, A., Nemirovski, A., Xie, Y., Xu, Ch. (2023) "Generalized generalized linear models: Convex estimation and online bounds." arXiv:2304.13793 <https://arxiv.org/pdf/2304.13793.pdf>.
4. Juditsky, A. and Nemirovski, A. (2025) " ℓ_1 -recovery of Linear Forms on Sparse Signals by Polyhedral Estimates" (in final pre-submission stage)

IV.C3. Self-Contained Lecture Notes

1. Nemirovski, A. (1994), *Information-Based Complexity of Convex Programming*, 269 pp.
http://www2.isye.gatech.edu/~nemirovs/Lec_EMCO.pdf
2. Nemirovski, A. (1994), *Interior Point Polynomial Time Methods in Convex Programming*, 224 pp.
http://www2.isye.gatech.edu/~nemirovs/Lect_IPM.pdf
Transparencies: https://www2.isye.gatech.edu/~nemirovs/Trans_IPM.pdf
3. Ben-Tal, A., Nemirovski, A. (1999), *Optimization II: Standard Numerical Methods for Nonlinear Continuous Optimization*, 252 pp.
http://www2.isye.gatech.edu/~nemirovs/Lect_OptII.pdf

4. Ben-Tal, A., Nemirovski, A. (2020/2021/2022/2023/**2025**), *Lectures on Modern Convex Optimization* [ISyE 8872/7683], 572 pp. + 150 pp. appendix.
<http://www2.isye.gatech.edu/~nemirovs/LMCOLN2025.pdf>
 Transparencies: <https://www2.isye.gatech.edu/~nemirovs/LMCOTR2025.pdf>
5. Ben-Tal, A., Nemirovski, A. (2008, 2020), *Optimization III: Convex Analysis, Nonlinear Programming Theory, Standard Nonlinear Programming Algorithms* [ISyE 6663], 298 pp (main body) + 39 pp (appendix).
<http://www2.isye.gatech.edu/~nemirovs/OPTIIILN2024Spring.pdf>
 Transparencies: <https://www2.isye.gatech.edu/~nemirovs/OPTIIITR2024Spring.pdf>
6. Nemirovski, A. (2009), *Lectures on Robust Convex Optimization*, 310 pp.
<http://www2.isye.gatech.edu/~nemirovs/ETHZurich.pdf>
 Transparencies: https://www2.isye.gatech.edu/~nemirovs/R0_Tr.pdf
7. Nemirovski, A. (2010), *Introduction to Linear Optimization* (ISyE 6661), 287 pp. (main body) + 49 pp. (appendix)
<http://www2.isye.gatech.edu/~nemirovs/OPTILN2023Spring.pdf>
<https://www.ams.org/open-math-notes/omn-view-listing?listingId=110636>
 Transparencies: <https://www2.isye.gatech.edu/~nemirovs/OPTITR2023Spring.pdf>
8. Juditsky, A., Nemirovski, A. (2016-18,2020,2023) *Lectures on Statistical Inferences via Convex Optimization* (ISyE 8813), 630 pp.
<http://www2.isye.gatech.edu/~nemirovs/StatOptLN2023Fall.pdf>
 Transparencies: <https://www2.isye.gatech.edu/~nemirovs/StatOptTR2023Fall.pdf>
9. **Nemirovski, A. (2025), *Descriptive Foundations of Convex Optimization* (ISyE 7682/7683/8813), 695 pp. <http://www2.isye.gatech.edu/~nemirovs/KKNTR2025.pdf>**

IV.D. Presentations (since 2000)

IV.D1. Plenary Lectures

1. Naor Lecture, Annual Meeting of Israeli OR Society, Maale Hamisha, Israel, May 2003.
2. Third Sino-Japanese Optimization Meeting, Singapore, October-November 2005
3. INFORMS Optimization Society Conference on Optimization and Health Care, San Antonio, USA, February 2006
4. “Selected Topics in Robust Convex Optimization”, ISMP2006 (19th International Symposium on Mathematical Programming), Rio de Janeiro, Brazil, July-August 2006
5. “Advances in Convex Optimization: Conic Programming”, ICM2006 (International Congress of Mathematicians), Madrid, Spain, August 2006
6. International Congress of Industrial and Applied Mathematics ICIAM2007, Zurich, Switzerland, July 2007
7. 11th International Conference on Stochastic Programming (SPXI), Vienna, Austria, August 27-31, 2007

8. 10th International Workshop on High Performance Optimization, Tilburg, The Netherlands, June 2008
9. International Conference “Nonlinear Analysis and Optimization”, Technion, Haifa, Israel, June 2008
10. 14th Belgian-French-German Conference on Optimization (BFG09), Leuven, Belgium, September 2009.
11. 8th Symposium of Chinese Mathematical Programming Society, Shanghai, China, May 2010.
12. The 24th European Conference on Operational Research (EURO XXIV), Lisbon, Portugal, July 2010.
13. International conference on Modeling and Optimization: Theory and Applications (MOPTA 2010), Lehigh University, Bethlehem, USA, August 2010.
14. CWI Workshop “Large Scale and Uncertain Optimization,” Amsterdam, The Netherlands, November 2010.
15. International conference “50 years to IPPI” – Institute for Information Transmission Problems of the Russian Academy of Sciences, Moscow, Russia, July 2011.
16. International Conference “Optimization, Games, and Dynamics,” Institut Henri Poincaré, Paris, France, November 2011.
17. [plenary tutorial] International Conference on Learning Theory (COLT 2012), Edinburgh, Scotland, June 2012.
18. PGMO Workshop 2013, Paris, France, October 2013.
19. London Optimization Workshop 2014, June 9-10, King’s College, London, UK
20. [keynote lecture] “Optimization and Big Data 2015” Workshop, Trek and Colloquium, May 6-8, 2015, Edinburgh, Scotland
21. [invited talk] Workshop “Bridging Mathematical Optimization, Information Theory, and Data Science”, Princeton Center For Theoretical Science, May 14-16, 2018 Princeton, USA
22. Le Cam Lecture, 50^e Journées de Statistique de la SFdS (JdS 2018), May 28, Paris-Saclay, France

IV.D2. Invited Workshop/Conference Talks

1. Workshop on Continuous Optimization and Industrial Applications, January 2000, Oberwolfach, Germany
T.2. 17 International Symposium on Mathematical Programming, August 2000, Atlanta, USA
2. International conference “New trends in Optimization and Computational Algorithms” (NTOC2001), , December 2001, Kyoto, Japan
3. INFORMS Annual Meeting, October 2003, Atlanta, USA
4. Columbia Optimization Days, November 2003, Columbia University, New York, USA
5. 8th Workshop on High Performance Optimization, June 2004, Amsterdam, the Netherlands

6. 1st International Conference on Continuous Optimization, August 2004, Troy, USA
7. Large Scale Robust Optimization Workshop, August 31 – September 2, 2005, Santa Fe, USA
8. INFORMS Annual Meeting, November 2005, New Orleans - San-Francisco, USA
9. INFORMS Optimization Meeting, March 2008, Atlanta, USA
10. SIAM Optimization Conference (2 talks), May 2008, Boston, USA
11. INFORMS Optimization Meeting, October 2008, Washington DC, USA
12. XX International Symposium on Mathematical Programming, August 2009, Chicago, USA
13. ONR Kickoff Workshop on Compressed Sensing, February 2009, Annapolis, USA
14. 2nd NIPS Workshop on Optimization for Machine Learning, December 2009, Whistler, Canada
15. ONR Compressed Sensing Workshop, May 2010, Atlanta, USA
16. IPAM Workshop “Numerical Methods for Continuous Optimization,” October 2010, Los Angeles, USA
17. International Workshop “Structural methods of data analysis and optimization,” December 2011, IPPI RAN, Moscow, Russia
18. XXI International Symposium on Mathematical Programming, August 2012, Berlin, Germany.
19. AMS Spring Eastern Sectional Meeting, March 2014, University of Maryland, Baltimore, USA.
20. Workshop on Information Theory, Learning and Big Data, Simons Institute for Theory of Computing, March 16-20, 2015, Berkeley, USA.
21. [keynote talk] Workshop “Three Oracles,” SkolTech. Moscow, Russia, Dec. 28, 2016
22. [plenary talk] Workshop on the Interface of Statistics and Optimization (WISO), The Statistical and Applied Mathematical Sciences Institute (SAMSI), February 7-8, 2017, Durham, NC, USA.
23. [invited talk] Workshop “Bridging Mathematical Optimization, Information Theory, and Big Data,” Princeton Center for Theoretical Science, May 14-16, 2018 Princeton, USA
24. [invited talk] Workshop “Foundations of Modern Statistics,” November 6-8, 2019, WIAS, Berlin, Germany.
25. [invited Zoom talk] Online conference “Advances in Stochastics and Statistics” in honor of Rafail Z. Khasminskii 90th anniversary, June 10, 2021, Le Mans University, France
26. [invited Zoom plenary talk] United States Naval Academy Optimization and Operations Research Conference, June 2, 2021 - June 4, 2021, <https://sites.google.com/usna.edu/usna-or-conference/home>
27. [invited Zoom talk] Conference “Optimization without Borders,” July 12-18, 2021 Adler Arena, Sochi, Russia <https://cs.hse.ru/hdilab/opti/>
28. [invited Zoom talk] Conference “ALGOPT2024 workshop on Algorithmic Optimization: Tools for AI and Data Science,” August 27-30, 2024, UCLouvain, Belgium
<https://sites.uclouvain.be/algopt2024/>

IV.D3. Invited Lectures

1. McMaster University, Canada, September 2000
2. Stieltjes Days, Delft Technical University, The Netherlands, September 2001
3. Medallion Lecture of IMS (Institute for Mathematical Statistics) at Joint Statistical Meeting 2003, San Francisco, USA, August 2003.
4. McMaster University, Canada, August 2004
5. Tutorial and research talk at Summer School “New Algorithmic Paradigms in Optimization”, Ascona, Switzerland, June 2008
6. Invited 5-hour tutorial “Robust Convex Optimization” — Workshop *Optimization Under Uncertainty*, NUS/IMS, December 2012, Singapore.
7. Invited 6-hour tutorial “Convex Programming Algorithms,” Optimization Workshop, FGV University, Rio de Janeiro, Brazil, July 2013,
8. Invited 2-hour tutorial “Saddle points and statistical estimation,” INRIA Saclay, Paris, France, October 2013.
9. [colloquium lecture] “Optimization and Big Data 2015” Workshop, Trek and Colloquium, May 6-8, 2015, Edinburgh, Scotland.
10. Lecture in *William Tutte’s 100th Distinguished Lecture Series*, Combinatorics & Optimization Department, Faculty of Mathematics, University of Waterloo, Waterloo, Canada, August 2017.
11. Invited 16-hour Ph.D. tutorial ”Statistical Inferences via Convex Optimization,” Vienna Graduate School on Computational Optimization, May 21- June 5, 2018, TU Wien, Vienna, Austria
12. 4-hour lectures on Statistical Inference via Convex Optimization at NSF TRIPODS Summer School ”Foundations of Data Science,” August 2019, ISyE GaTech.
13. ”Topics in Convex Optimization” - 6th WLA Forum, November 5, 2024 , Shanghai, China
<https://www2.isye.gatech.edu/~nemirovs/WLALectureFinal.pptx>

IV.E. Grants and Contracts

IV.E1. As Principal Investigator

At Technion – Israel Institute of Technology

[all grants were PI’d jointly with Prof. Aharon Ben-Tal]:

1. 1994/97 – 3-year grant from the Israel Academy of Sciences (\$ 75,000) for the research ”Interior point polynomial time methods for optimization over the cone of positive semidefinite matrices”
2. 1997/99 – 3-year grant from the German-Israeli Science Foundation (Israeli budget: DM 242,000) for the research ”Robust solutions of optimization problems with applications to Engineering design”

3. 1997/99 – 3-year grant from the Israeli Ministry of Sciences (\$ 200,000) for the research “Large-scale optimization: modelling, algorithms and applications”
4. 1997/99 – 3-year grant of European Commission (ESPRIT Programme) (Israeli budget: \$ 480,000) for the research “Parallel PETSCAN system”
5. 1999/02 – 3-year grant from the Israeli Ministry of Sciences (\$ 90,000) for the research “Uncertainty-immunized solutions to linear programs and extensions”
6. 1999/02 – 3-year grant from the Israeli Academy of Sciences (\$ 101,500) for the research “Tractable approximations of intractable optimization problems”
7. 2003/06 – 3-year grant from the Binational Science Foundation (\$ 66,000) for the research “Tractable models and efficient methods in Robust Optimization” (US counterpart: S. Boyd, Stanford University, and L. El Ghaoui, University of Berkeley)
8. 2004/07 – 3-year grant from the Israeli Science Foundation (\$ 90,000) for the research “Mirror Descent algorithms for extremely large-scale convex optimization”.
9. 1997 – 2011 “Minerva Optimization Center (joint with Prof’s A. Ben-Tal (head), U. Kirsch, U. Rothblum, U. Shamir); Minerva Foundation endowment DM 2,000,000.

Georgia Institute of Technology:

10. NSF: DMI-0619977, Division CMMI: *Tractable Approximations of Chance Constrained Optimization Problems*, 3-year grant of \$ 379,500, 07/20/2006 – 08/31/2009 (PI; CoPI Prof. Alexander Shapiro, ISyE, GaTech),
11. ONR: # N000140811104: *Efficiently Computable Compressed Sensing*, 07/07/2008 – 10/30/2012 (PI; CoPI’s: Proff. S. Ahmed, W. Cook, A. Shapiro, ISyE, GaTech), \$ 945,800.
12. BSF (USA-Israel Binational Science Foundation) grant # 2008302 “Fast algorithms for huge-scale convex optimizations: Theory and applications” (Fall 2009 – Summer 2013, on hold in Academic Year 2010-11 because of the sabbatical leave of the Israeli PI). I was the US PI, the Israeli PI was Prof. Aharon Ben-Tal, Technion, Israel. The BSF budgets always are fully handled by the Israeli side and include only travel money for the US side (in this case up to \$2,500 per year).
13. NSF Grant CMMI-1232623 *Design of Efficient Saddle Point Algorithms for Large-scale/Complex Geometry Convex Optimization*, 09/01/2012 – 08/31/2015 (no cost extension till 12/31/2015). (PI; CoPI Prof. Alex Shapiro, ISyE), \$ 450,000.
14. NSF Grant CMMI-1262063 *Collaborative Research: Modeling and Control of Magnetic Chemotherapy*, 07/01/2013¹³ – 06/30/2016 (GaTech PI; other PI’s Prof. Benjamin Shapiro, project coordinator, University of Maryland at College Park, and Prof. Oscar Bruno, Cal-Tech), \$ 40,261 (GaTech budget).
15. NSF Grant CCF-1523768 *Statistical Inference via Convex Optimization*, 08/01/2015 – 07/31/2019 (PI; Co-Pi Prof. V. Koltchinskii), \$ 460,111.
16. Sponsor: University Grenoble-Alpes, France, project # GR00019483 “High-dimensional Inference by Convex Optimization,” 12/01/2021– 01/01/2024 (no-cost extension till 12/01/2025 has been requested in December 2023 and was obtained on June 2024) (PI), \$ 86,010.

¹³for GaTech, funding and activity started on 07/01/2014

IV.E2. As Co-Principal Investigator

1. NSF Grant DMS-0914785 *Efficient stochastic oracle based algorithms for stochastic programming and large scale convex optimization*, 09/15/2009 – 08/31/2012, with no cost extension till 08/31/2013 (CoPI; PI Prof. Alexander Shapiro, ISyE GaTech), \$ 327,417.
2. NSF Grant CCF-1415498 *EAGER: Convex Optimization Algorithms for 21st Century Challenges*, 03/01/2014 – 02/28/2017. (Co-PI; PI Prof. S. Vempala, other Co-PI's Proff. V. Koltchinskii, J. Romberg, P. Tetali), \$ 300,000

IV.F. Other Scholarly and Creative Accomplishments

No data

IV.G. Societal and Policy Impact

No data

IV.H. Other Professional Activities

Visiting academic appointments:

1. Visiting Professor, Institute for Operations Research, ETH Zurich, September 18 – October 24, 2009.
2. Distinguished Visiting Professor, Technion – Israel Institute of Technology, 5-year appointment October 2006 - September 2011. Extended for 5 years more in Fall 2011.
3. Georgia Institute of Technology, School of Industrial and Systems Engineering, USA
August 2003 - January 2005: Visiting Professor on sabbatical leave from the Technion
4. Adjunct Visiting Professorship, Faculty of Mathematics, University of Waterloo, Canada,
2000 – 2004 (month-long visits in 2000, 2002, 2004)
5. Stieltjes Visiting Professorship, Stieltjes Institute, The Netherlands, August - September 2001
6. Technical University of Delft, Faculty of Technical Mathematics and Informatics, Delft, The Netherlands
March 1998 - August 1998: Visiting Professor on sabbatical leave from the Technion

Membership in professional organizations:

1. National Academy of Sciences (class of 2020)
2. National Academy of Arts and Sciences (class of 2018)
3. National Academy of Engineering (class of 2017)
4. AMS (2019 – 2021)
5. SIAM (2019 – 2021)
6. INFORMS (2019 –)

V. Teaching

V.A. Courses Taught (since 2016)

Year & Semester	Course #	Course Title	# of students
2025/Fall	ISyE 8813	Special Topics in OR Descriptive Foundations of Convex Optimization	21
2025/Spring	ISyE 7683	Advanced Nonlinear Programming Descriptive Foundations of Convex Optimization	17
2024/Fall	ISyE 8813	Special Topics in OR Modern Convex Optimization	7
2024/Fall	ISYE 6661 NEM	Introduction to Linear Optimization	49
2024/Spring	ISyE 7683	Advanced Nonlinear Programming Modern Convex Optimization	18
2024/Spring	ISYE 6663 NEM	Nonlinear Optimization (Optimization III)	51
2023/Fall	ISyE 8813	Special Topics in OR Statistical Inference via Convex Optimization	15
2023/Spring	ISyE 7683	Advanced Nonlinear Programming Modern Convex Optimization	8
2023/Spring	ISyE 6661	Introduction to Linear Optimization	30
2022/Fall	ISyE 8813	Special Topics in OR Modern Convex Optimization	18
2022/Spring	ISYE 6663 NEM	Nonlinear Optimization (Optimization III)	42
2022/Spring	ISYE 7683	Advanced Nonlinear Programming Modern Convex Optimization	12
2021/Fall	ISYE 6663 NEM	Nonlinear Optimization (Optimization III)	29
2021/Spring	ISYE 7683	Advanced Nonlinear Programming Modern Convex Optimization	9
2021/Spring	ISYE 6663 NEM	Nonlinear Optimization (Optimization III)	37
2020/Fall	ISYE 8813 NEM	Special topics in OR Modern Convex Optimization	33
2020/Spring	ISYE 8813 NM2	Special Topics in OR Modern Convex Optimization	8
2020/Spring	ISYE 6663 NM2	Nonlinear Optimization (Optimization III)	75
2019/Fall	ISYE 8813 NEM	Special topics in OR Modern Convex Optimization	9
2019/Spring	ISYE 7683 NEM	Special topics in OR Modern Convex Optimization	26
2018/Fall	ISYE 6661	Introduction to Linear Optimization	76
2018/Fall	ISYE 8813 NEM	Special topics in OR Modern Convex Optimization	25
2018/Spring	ISYE 6663	Nonlinear Optimization (Optimization III)	58
2018/Spring	ISYE 6661	Introduction to Linear Optimization	22
2017/Fall	ISYE 4803-NM2	Linear and Convex Optimization	15
2017/Spring	ISYE 6661	Introduction to Linear Optimization	17
2017/Spring	ISYE 8813 NEM	Special Topics in OR "Selected Topics in Big Data" [two 7-week parts were taught by Prof. J. Wu (first) and by myself (second)]	22
2016/Fall	ISYE 4803-NM2	Linear and Convex Optimization	41
2016/Spring	ISYE 4803-NM2	Linear and Convex Optimization	44
2016/Spring	ISYE 6661	Introduction to Linear Optimization	15

V.B. Individual Student Guidance

V.B1.a Ph.D. Students

Graduated, Technion – the Israel Institute of Technology:

1. Alexander Goldenshluger, Ph.D. student in OR and System Analysis, topic: "Nonparametric estimation in linear dynamic systems under uncertainty" – got Ph.D. degree in

October 1996; now Full Professor at the Department of Statistics, University of Haifa, Israel

2. Boris Ginzburg (temporary supervision, Oct. 1994 – Jan. 1996), Ph.D. student in Applied Mathematics - got Ph.D. in 1997
3. Michael Zibulevski (joint supervision with Prof. A. Ben-Tal), Ph.D. student in OR and System Analysis, topic: "Penalty/Barrier multiplier method for large-scale nonlinear optimization problems" – got Ph.D. degree in December 1996; now Senior Research Associate at the Technion – Israel Institute of Technology
4. Dmitri Lieber (senior supervisor - Professor Reuven Rubinstein), Ph.D. student in OR and System Analysis, topic: "Rare-event estimation via cross-entropy and importance sampling" – got Ph.D. in 1999
5. Tamar Margalit (joint supervision with Prof. A. Ben-Tal), Ph.D. student in OR and System Analysis, topic: "Methods of large scale convex optimization with applications to Positron Emission Tomography problem" – got Ph.D. in 2000 (Thesis was awarded by the Naor Prize of the Israeli OR Society)
6. Elena Olvovski, Ph.D. Student in Mathematics (joint supervision with Prof. Alex Ioffe), topic: "Novel Subgradient Descent Methods for Extremely Large-Scale Nonsmooth Convex Optimization" – got Ph.D. in April 2006, now – in HiTech Industry in Israel

Graduated, ISyE GaTech:

1. Zhaosong Lu, ISyE OR Ph.D. student (joint supervision with Prof. Renato Monteiro), topic: "Algorithm Design and Analysis for Semidefinite Programming and Large Scale Nonlinear Optimization," got Ph.D. degree in June 2005. At present Associate Professor of Operations Research, Department of Mathematics, Simon Fraser University, Canada
2. Guanghui Lan, ISyE OR Ph.D. student (joint supervision with Prof. Renato Monteiro and Prof. Alex Shapiro), topic "Convex Optimization under Inexact First-order Information," got Ph.D. degree in June 2009, at present Associate Director of Machine Learning and Data Science and A. Russell Chandler III Professor at ISyE GaTech.
3. Bruce Cox (Airforce support), ISyE OR Ph.D. student (started in Fall 2006), topic "Application of Accuracy Certificates for Problems with Convex Structure," left GaTech for Pentagon in August 2009, got Ph.D. degree in January 2011. At present, Assistant Professor of Operations Research at U.S. Air Force Institute of Technology, Dayton, Ohio
4. Fatma Kiliç Karzan, ISyE OR Ph.D. student, supervision since January 2009, topic "Tractable relaxations and algorithmic techniques for large-scale optimization," got Ph.D. degree in June 2011. At present tenured Associate Professor in the Tepper Business School, Carnegie-Mellon University.
5. Cristobal Guzman, ISyE ACO Ph.D. student, supervised since Spring 2011 (since Spring 2013 - jointly with Prof. Sebastian Pokutta), topic: "Information, Complexity and Structure in Convex Optimization," got Ph.D. degree in Spring 2015. Since September 2016, holds tenure-track Assistant Professorship at Faculty of Mathematics, Pontifical Catholic University of Chile; at present Assistant Professor of the Statistics Group in the Department of Applied Mathematics at the University of Twente, the Netherlands, on leave from the Catholic University of Chile.

6. Niao He, ISyE OR Ph.D. student, supervised since Spring 2012, topic: "Saddle Point Techniques for Multi-Term Composite Optimization and Error-in-Measurement Optimization," got Ph.D. degree in Fall 2015. At present Assistant Professor in the Department of Computer Science at ETH Zürich, Switzerland
7. Georgios Kotsalis (secondary supervision; primary supervisor Prof. G. Lan), ISyE OR Ph.D. student, supervision since September 2017, topic: "Tractable approximations and algorithmic aspects of optimization under uncertainty," got Ph.D. degree in Spring 2022, at present - Quatitative Researcher at Citadel, New York

V.B2. M.Sc. Students, graduated with M.Sc. Theses

Technion – the Israel Institute of Technology:

1. Dmitri Lieber (primary supervisor - Professor Reuven Rubinstein) M.Sc. student, topic: "On-line optimization of Discrete Event Systems" – got M.Sc. degree in 1996.
2. Tamar Margalit (joint supervision with Prof. A. Ben-Tal), M.Sc. student in OR and System Analysis, topic: "Robust Mathematical Programming" – got M.Sc. degree in May 1997.
3. Elana Guslitzer, M.Sc. student in OR and System Analysis, topic: "Uncertainty-Immunized Solutions in Linear Programming" – got M.Sc. degree in July 2002.
4. Oded Levinger (joint supervision with Prof. A. Ben-Tal), M.Sc. student in OR and System Analysis, topic: "Robust Linear Programming" – got M.Sc. degree in February 2003.
5. Dmitri Gabilev, M.Sc. student in OR and System Analysis, topic: "Polynomial Time Cutting Plane Algorithms Associated with Symmetric Cones" – got M.Sc. degree in March 2003.
6. Dorin Steinberg, M.Sc. student in OR and System Analysis, topic: "Computation of Matrix Norms with Applications to Robust Optimization" – got M.Sc. degree in July 2005.
7. Eitan Rubinstein (since Fall 2005 – joint supervision with Dr. Michael Zibulevski), M.Sc. Student in Electrical Engineering, topic "Support Vector Machines via Advanced Optimization Techniques" – got M.Sc. degree in February 2006; works at Israeli branch of Intel.

V.B3. Undergraduate Students

No data

V.B4. Service on Thesis and Dissertation Committees

#	Name	School	Advisor	Date	Type
1.	Zhaosong Lu	ISyE	Prof. R. Monteiro Prof. A. Nemirovski	2005	internal
2.	Guanghui Lan	ISyE	Prof. R. Monteiro Prof. A. Nemirovski Prof. A. Shapiro	2009	internal
3.	Dylan Shepardson	ISyE	Prof. C. Tovey	2009	internal
4.	Bruce Cox	ISyE	Prof. A. Nemirovski	2011	internal
5.	Karthik Sridharan	Toyota Techn. Inst.	Prof. N. Srebro	2011	external
6.	Fatma Kilinc Karzan	ISyE	Prof. A. Nemirovski	2011	internal
7.	Yan Shu	Sch. of Math. (ACO)	Prof. E. Johnson	2011	internal
8.	Ulas Cakmak	ISyE	Prof. Sh. Ahmed	2012	internal
9.	Daniel Dadush	ISyE (ACO)	Prof. S. Vempala	2012	internal
10.	Wajdi Tekaya	ISyE	Prof. A. Shapiro	2013	internal
11.	Camilo Ortiz	ISyE	Prof. R. Monteiro	2014	internal
12.	Diego Ramirez	ISyE	Prof. S. Dey	2014	internal
13.	Cristobal Guzman	ISyE	Prof. A. Nemirovski	2015	internal
14.	Javad Feizollahi	ISyE	Prof. Sh. Ahmed	2015	internal
15.	Niao He	ISyE	Prof. A. Nemirovski	2015	internal
16.	Tonghoon Suk	ISyE	Prof. A. Dieker	2016	internal
17.	Alvaro Lorca	ISyE	Prof. A. Sun	2016	internal
18.	Weijun Xie	ISyE	Prof. S. Ahmed	2017	internal
19.	Roland Hildebrand	U. Grenoble-Alpes, France	N/A (Habilitation Thesis)	2017	external
20.	Stewart Curry	ISyE	Prof. N. Serban	2019	internal
21.	Digvijay Boob	ISyE (ACO)	Prof. G. Lan, Prof. S. Dey	2020	internal
22.	Weiwei Kong	ISyE	Prof. R. Monteiro	2021	internal
23.	Cyrille Combettes	ISyE	Prof. S. Pokutta	2021	internal
24.	Liyang Xie	ISyE	Prof. Y. Xie	2021	internal
25.	Rui Peng Liu	ISyE	Prof. A. Shapiro	2022	internal
26.	Andrew McRae	ECE	Prof. M. Davenport	2022	internal
27.	Jiaming Liang	ISyE	Prof. R. Monteiro	2022	internal
28.	Georgios Kotsalis	ISyE	Prof. G. Lan	2022	internal
29.	Shixuan Zhang	ISyE	Prof. A. Sun	2022	internal
30.	Dmitry Kovalev	KAUST, Saudi Arabia	Prof. P. Richtarik	2022	external
31.	Ziyi Wang	AE	Prof. E. Theodorou	2022	internal
32.	Yiling Luo	ISyE	Prof. X. Huo	2022	internal
33.	Neda Tavakoli	Sch. of CS&E	Prof. S. Aluru	2023	internal
34.	Hongzhang Shao	ISyE	Prof. A. Kleywegt	2023	internal
35.	Zhang Zhe	ISyE	Prof. G. Lan	2023	internal
36.	Li Yan	ISyE	Prof G. Lan, Prof. T. Zhao	2024	internal
37.	Arnesh Sujjanani	ISyE	Prof. R. Monteiro	2024	internal
38.	Chen Xu	ISyE	Prof Y. Xie	2024	internal
39.	Tianjiao Li	ISyE	Prof. G. Lan, Prof. A. Pananjady	2025	internal
40.	Augustine Saravanos	AE	Prof. E. Theodorou	2025	internal
41.	Yiling Xie	ISyE	Prof. X. Huo	2025	internal

V.C. Other Teaching Activities

V.C1. Course Development

1. Writing self-contained Lecture Notes for 8 Ph.D. level courses, see section IV.C3.
2. Design of Ph.D. Course *Lectures on Modern Convex Optimization* (ISYE 8813/7683 "Advanced Nonlinear Programming") (2005,2013-15,2020-23)

3. Design of Ph.D. Course *Lectures on Robust Optimization* (2009)
4. Design of Ph.D. Course ISyE 6661 *Introduction to Linear Optimization* (2010)
5. Design of advanced Undergraduate Course ISyE 4803 NM *Linear and Convex Optimization*. Self-contained transparencies (583 pp.) are available at <http://www2.isye.gatech.edu/~nemirovs/LC4803TR2022.pdf>
6. Design of Ph.D. Course ISyE 8813 *Statistical Inferences via Convex Optimization* (2016, 2017, 2020-22)
7. Design of Ph.D. Course ISyE 7682/7683/8813 *Descriptive Foundations of Convex Optimization* (2025), 612 self-contained transparencies at <https://www.isye.gatech.edu/~nemirovs/KKNTR2025Fall.pdf>

VI. Service

VI.A. Professional Contributions

VI.A1. Editorial Board Memberships

1. Associated Editor for *Mathematics of Operations Research* (1993-97)
2. Member of Editorial Board of *Optimization in Engineering* (1998-2005)
3. Member of Editorial Board of *Avtomatika and Telemekhanika* (Russian; English translation *Automation and Remote Control*), 2015 –

VI.A2. Organization and Chairmanship of Technical Sessions, Workshops and Conferences

1. Co-director of Oberwolfach Workshop on Continuous Optimization (January 2000)
2. co-director of Minerva Summer Schools “Modern Convex Optimization and its Engineering Applications”
 - (a) Haifa, Israel, August 2000
 - (b) Thurnau, Germany, September 2003
3. Vice-Head of *Minerva Optimization Center* at the Technion, 1997-2006

VI.B. Public and Community Service

No data

VI.C. Institute Contributions

VI.C1. College Committee Service

1. Member of COE Regents Professors Advisory Committee (Spring 2010 – Spring 2011, Spring 2019 – Fall 2020)

VI.C2. School Committee Service

Technion:

1. Member of Preparatory Committee of Faculty of Industrial Engineering and Management, 1994-2006
2. Coordinator of the OR Department of Faculty of Industrial Engineering and Management, 1998-2000

GaTech:

1. Member of Graduate Committee (2006,2007,2021)
2. Member of Hiring Committee (2007,2008)
3. Member of PPR Committee (Spring 2012 – Spring 2013, Fall 2020 – Fall 2021)
4. Member of PTR Committee (Spring 2016 - Fall 2018, Fall 2023 - Spring 2024)
5. Member of Advisory Committee (Fall 2019 – Spring 2021, FY2025-26)