Dimitri P. Bertsekas

McAfee Professor at EECS, MIT

Fulton Professor at CIDSE, ASU

Now

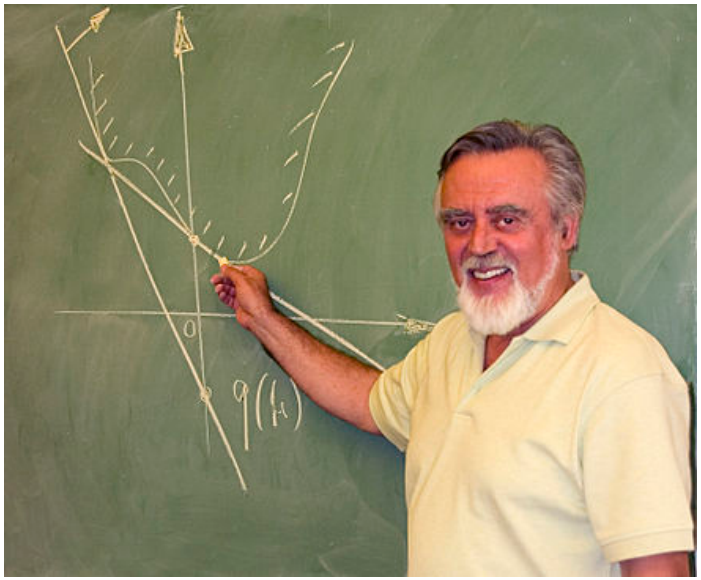
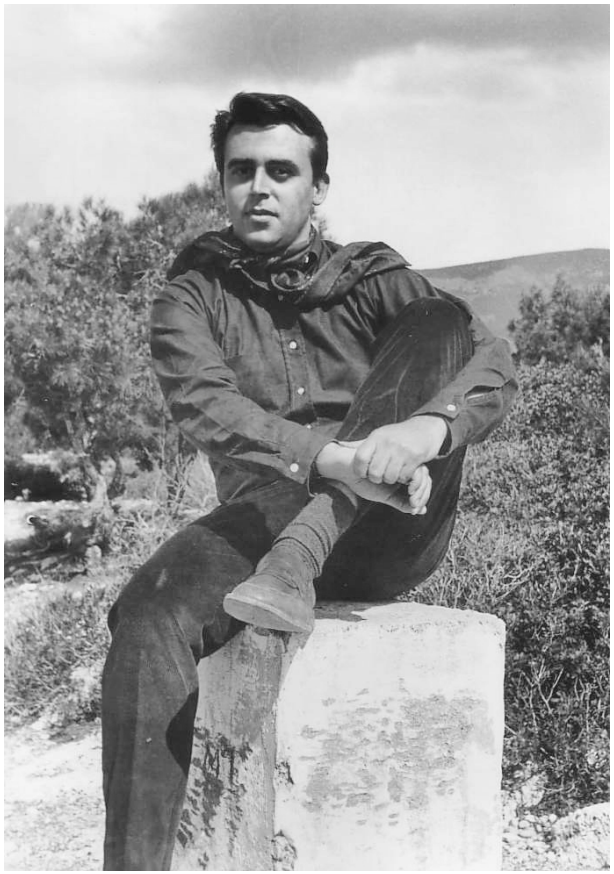


Figure 1: Writing on a board at MIT; Writing on a brick-wall at ASU

Journey to academia starts in 1964



Beginning: Alma Mater

National Technical
University of Athens

Figure 2: Graduated from National Technical University of Athens (1968, Mechanical Engineering). Rumor has it he was engaged more in out-of-school activities. Nevertheless, Dimitri is on the list of the notable alumni of NTU.

Coming to USA

Figure 3: Received his M.S. in Electrical Engineering from George Washington University, Washington D.C. (1969), in a year and a half, attending the school at night while having a full-time job as research engineer.

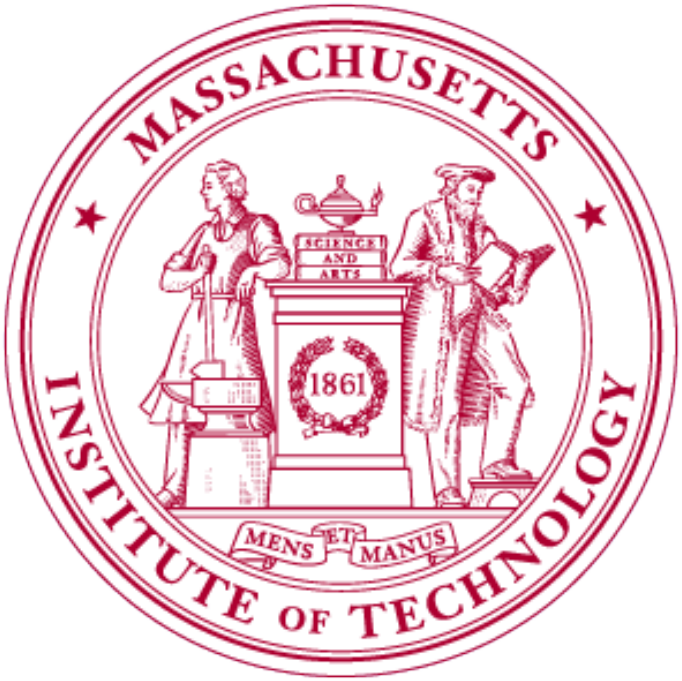
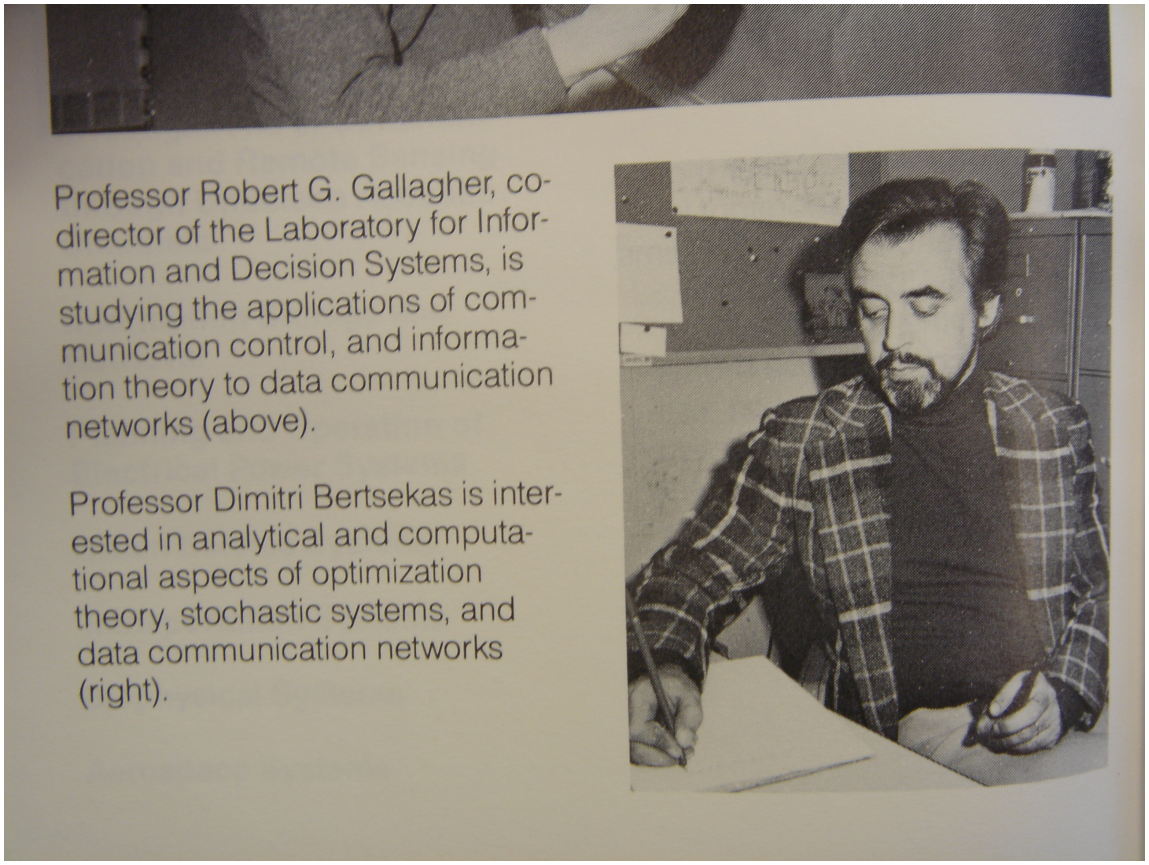


Figure 4: Received his Ph.D. in System Science from MIT (1971). Thesis *Control of Uncertain Systems with a Set-Membership Description of the Uncertainty*, **advisor Ian Burton Rhodes, Assistant Professor 1967–1969.**

Career Path

- At Stanford for 3 years
- At UIUC for 5 years
- Joined EECS MIT in 1979 (picture from 1980)
- Joined CIDSE ASU in 2019



Academic Children

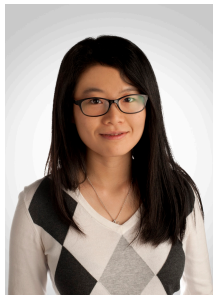








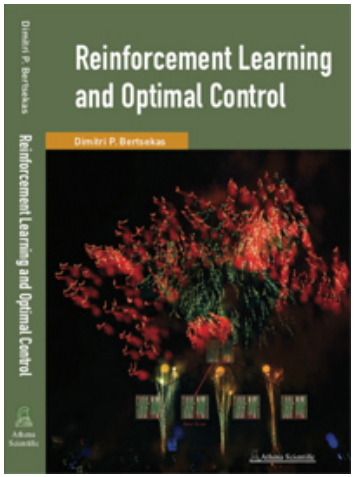


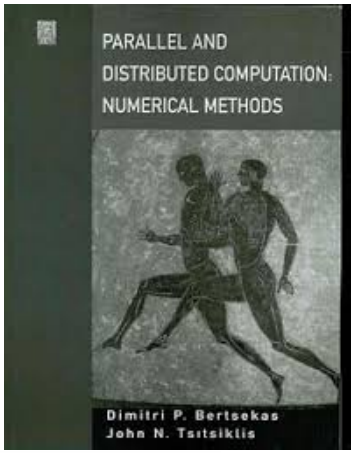


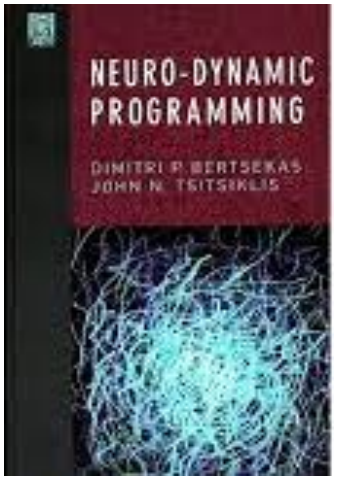
- Steven E. Shreve
- Barry Kort
- Eli Gafni
- Paul Tseng
- Xavier Luque
- Kevin Tsai
- Jonathan Eckstein
- Manos Varvarigos
- Steven Patek
- Jinane Abounadi
- Cynara Wu
- Angelia Nedić
- Asu Ozdaglar
- Huizhen Janey Yu
- Mengdi Wang

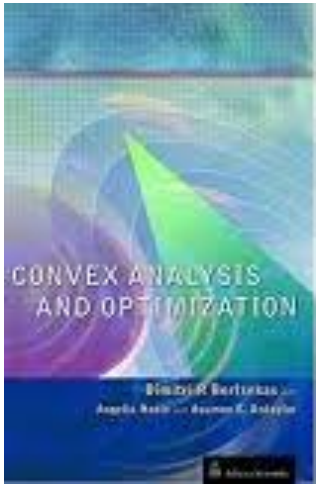
Prolific Researcher/Writer

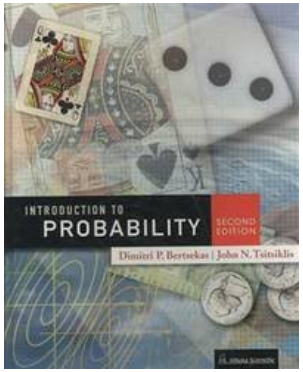
170 papers and book chapters, 69 conference proceeding papers, and 16 books

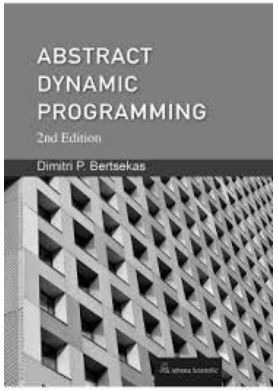


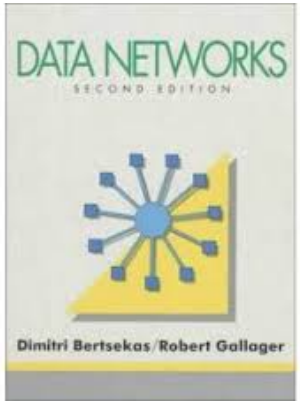


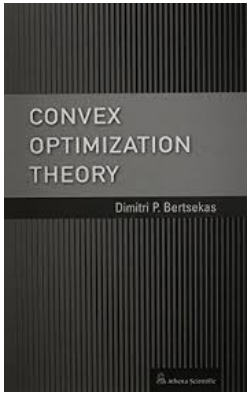


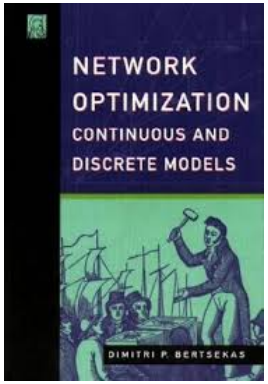






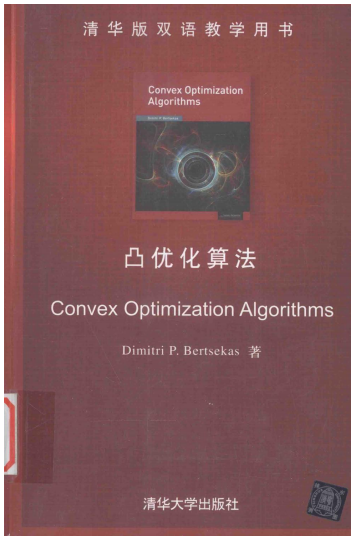






Probability Team

Favorite book and why? Introduction to Probability – the most challenging to write; it is undergraduate level, mathematically rigorous, but has no formal theorems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凸优化算法
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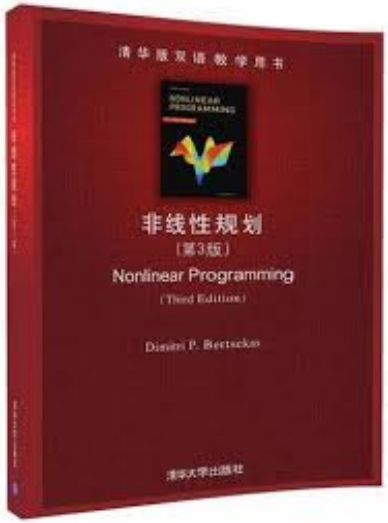
Dimitri P. Bertsekas 著
清华大学出版社


MATHEMATICS IN SCIENCE AND ENGINEERING
Volume 125
Dynamic Programming and Stochastic Control
Dimitri P. Bertsekas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清华大学出版社


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[美] Dimitri P. Bertsekas 著
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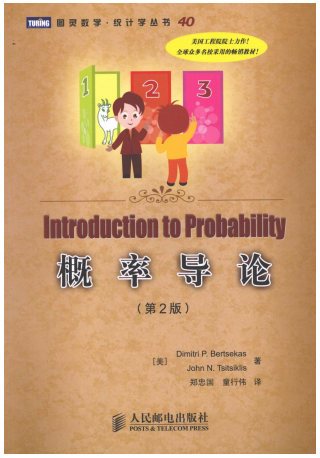
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1 2 3
Introduction to Probability
概率导论
(第2版)
[美] Dimitri P. Bertsekas John N. Tsitsiklis 著
郑忠国 童行伟 译
人民邮电出版社


概率导论
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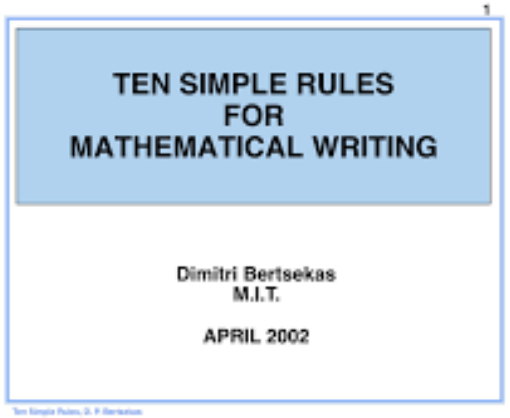

TEN SIMPLE RULES
FOR
MATHEMATICAL WRITING
Dimitri Bertsekas
M.I.T.
APRIL 2002


Talk by
DIMITRI P. BERTSEKAS
講者: Dimitri Bertsekas
美國麻省理工學院（MIT）EECS系 McAfee講座教授
IEEE Fellow 美國國家工程學院院士
講題: Academia, Art and Life
Time: 5/28, 4.10pm – 5.00pm
Place: 70507 (七館五樓 電通學院會議室)

Academia

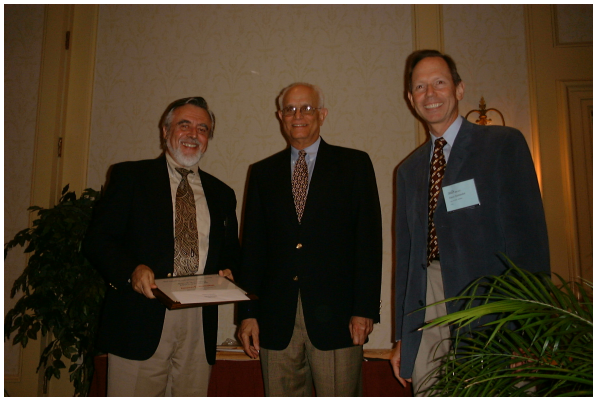
Research areas: dynamic programming, optimal control, reinforcement learning, convex and non-convex optimization, distributed and asynchronous computation, data networks ...

Q: The algorithms you have developed that you are proud of?

- Set Membership Estimation and Control Algorithms (PhD Thesis, 1971)
- Auction Algorithms for Assignment and Network Flow Optimization (starting in 1979)
- Distributed Asynchronous Dynamic Programming (1982)
- Extensive Development of Augmented Lagrangian Methods (starting in 1972)

Recognitions

- INFORMS 1997 Prize for Research Excellence in the Interface Between Operations Research and Computer Science for the book *Neuro-Dynamic Programming*
- 2000 Greek National Award for Operations Research
- 2001 ACC John R. Ragazzini Education Award
- 2001 Elected United States National Academy of Engineering
- 2009 INFORMS Expository Writing Award
- 2014 INFORMS Khachiyan Prize for Life-Time Accomplishments in Optimization
- 2014 ACC Richard E. Bellman Control Heritage Award
- SIAM/MOS 2015 George B. Dantzig Prize
- 2018 INFORMS John von Neumann Theory Prize



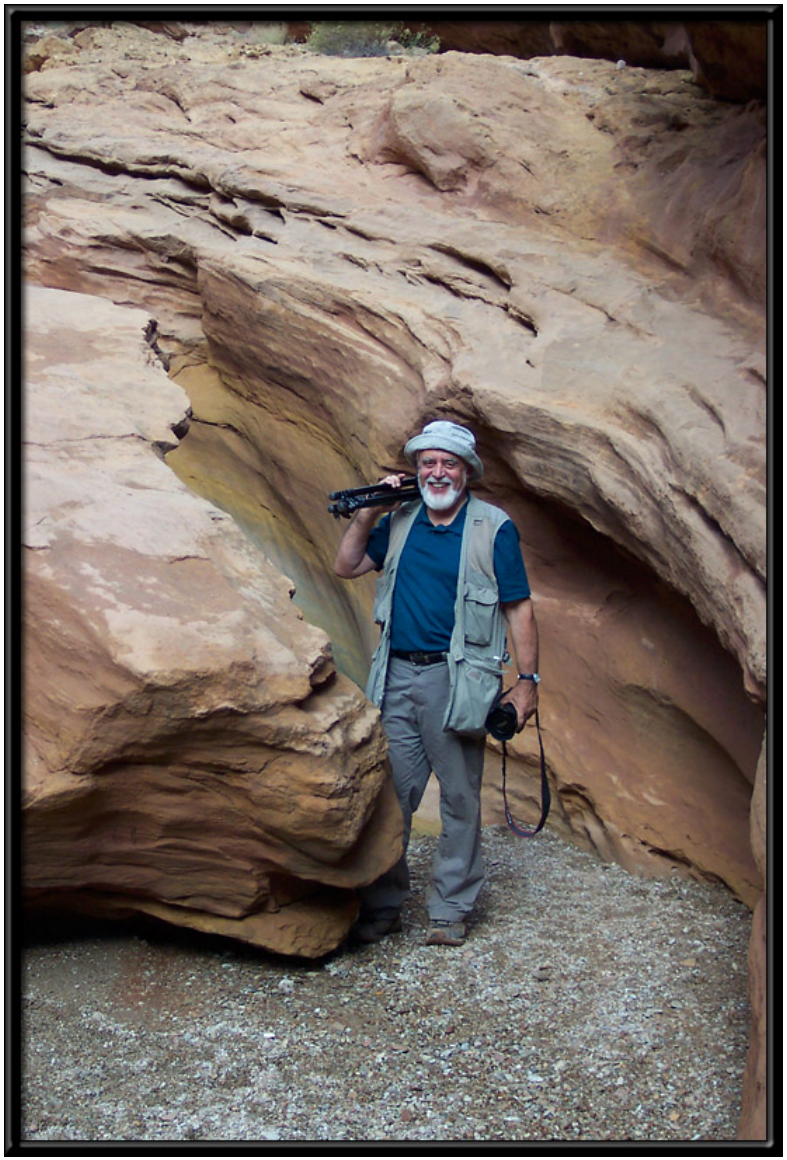
Left: American Automatic Control Council (AACC): 2001John R. Ragazzini Education Award awarded to Dimitri P. Bertsekas for outstanding contributions to graduate education and research in *systems, control and optimization.*

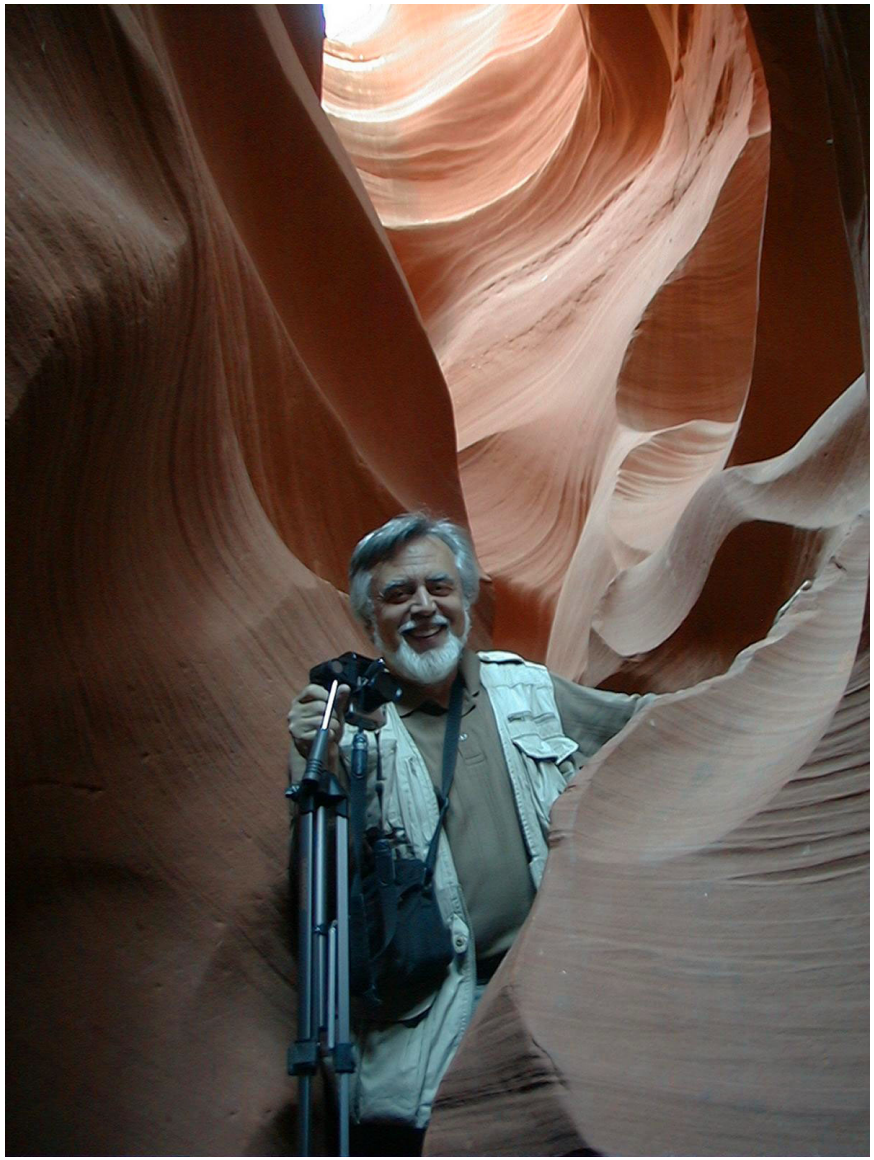
Middle: 2014 INFORMS Optimization Society Khachiyan Prize: "Professor Bertsekas's theoretical contributions include his resolving the question of conditions for a consistent recursive form for dynamic programming with uncountable state-spaces ... a pioneer in network optimization through his development of the classes of auction and relaxation algorithms.

Right: 2018 INFORMS John Von Neumann Theory Prize for making fundamental contributions to theory in OR and MSs. The work of Bertsekas and Tsitsiklis is characterized by its innovation, depth and clarity, and it has had tremendous impact ... brought the fields of computer science and operations research closer together through unifying theory.

Art

Life



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